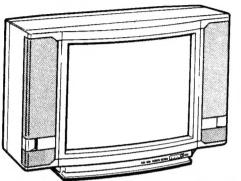
# SERVICE MANUAL



# US Model

Chassis No. SCC-C59C-A

# Canadian Model

Chassis No. SCC-C60C-A



Note: The service manual for RM-763 has been issued separately.

MODELS OF THE SAME SERIES							
KV-27HSR10	KV-32HSR1D						
KV-27XBR10/27XBR60							
KV-32XBR10/32XBR70							

### **SPECIFICATIONS**

American TV standards Television system

Channel coverage

VHF: 2-13 UHF: 14-69

Cable TV: 1-125

Picture tube

Microblack Trinitron tube

27-inch picture measured diagonally

29-inch picture tube measured

diagonally

Antenna

75-ohm external antenna terminal

for VHF/UHF

input

VIDEO 1, 2 and 3 IN

S VIDEO IN (4-pin mini DIN)

Y: 1 Vp-p, 75-ohms

unbalanced, sync negative C: 0.286 Vp-p (Burst signal),

75-ohms

Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync

negative Audio (phono jacks): 500 mVrms

(100% modulation) Impedance: 47 kilohms

Output

MONITOR OUTPUT

S VIDEO OUTPUT (4-pin mini

Y: 1 Vp-p, 75-ohms

unbalanced, sync negative

C: 0.286 Vp-p (Burst signal)

75-ohms

Video (phono jacks): 1 Vp-p,

75-ohms unbalanced, sync

negative

Audio (phono jacks): 500 mVrms

(100% modulation) Impedance: 10 kilohms AUDIO OUTPUT (VARIABLE) (phono

iacks)

More than 408 mVrms at the

maximum volume setting

(variable)

Impedance: 5 kilohms

Power requirements 120V AC. 60Hz

225W (max.) Power consumption

1.5W (in standby condition)

Accessories supplied

Remote Commander RM-763

with 4 size AA (R6) bateries (1)

Antenna connector (1)

Optional accessories

U/V mixer EAC-66 Connecting cable VMC-810/820S YC-15V/30V

Video rack

SU-235X (with super-woofer)

SU-235X (with super-woofer)

SU-251 (black)

SU-330 (black)

Design and specifications are subject to change without notice.



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### WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

### SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY SHADING AND MARK

NON THE SCHEMATIC DIAGRAMS, EXPLODED
VIEWS AND IN THE PARTS LIST ARE CRITICAL TO
SAFE OPERATION. REPLACE THESE COMPONENTS
WITH SONY PARTS WHOSE PART NUMBERS APPEAR
AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS
PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS
THAT ARE CRITICAL TO SAFE OPERATION ARE
IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE
REPLACED OR IMPROPER OPERATION IS SUSPECTED.

### ATTENTION!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

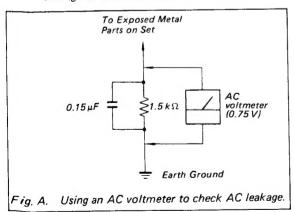
### ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE À SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

# SAFETY CHECK-OUT (US Model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

- Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
- Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
- Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
- Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
- Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
- Check the line cord for cracks and abrasion.
   Recommend the replacement of any such line cord to the customer.
- Check the condition of the monopole antenna (if any).
  - Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
- 8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
- Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.



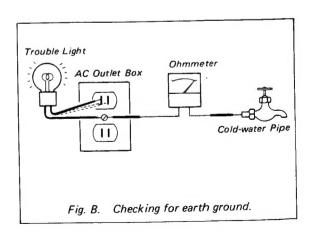
### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
- 2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

## HOW TO FIND A GOOD EARTH GROUND

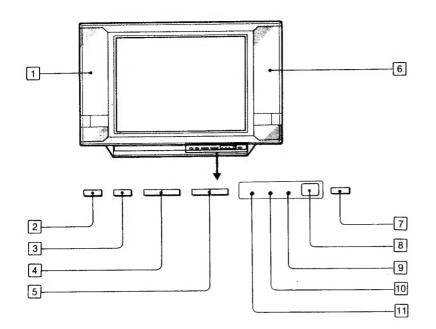
A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)



# SECTION 1 GENERAL

### 1-1. LOCATION OF CONTROLS

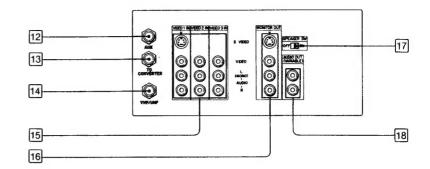
### Front panel



- 1 Left speaker (tweeter and woofer)
- 2 ( ) SRS (Sound Retrieval System) button
- 3 TV/VIDEO button
- 4 VOLUME buttons
- 5 CHANNEL buttons
- 6 Right speaker (tweeter and woofer)

- 7 POWER switch
- 8 Remote sensor
- 9 SLEEP indicator
- 10 STEREO indicator
- 11 TIMER indicator

### Rear panel



12 AUX (auxiliary) terminal

13 TO CONVERTER terminal

14 VHF/UHF antenna terminal

15 VIDEO 1, 2, 3 IN jacks (phono jacks)

16 MONITOR OUT jacks (phono jacks)

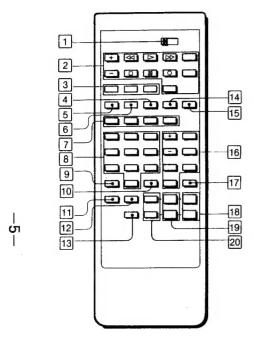
17 SPEAKER SW (switch)

18 AUDIO OUT (VARIABLE) jacks (phono jacks)

-4-

### Remote Commander RM-763

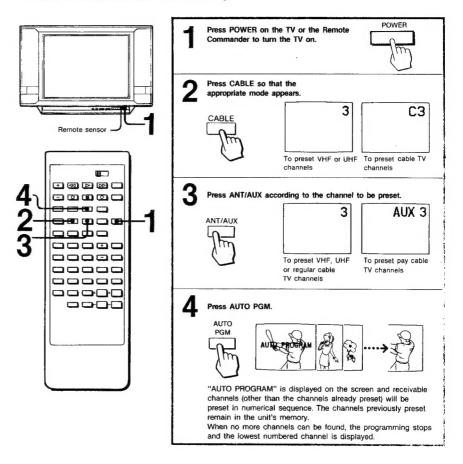
The buttons with \* mark have the same function as the buttons with the same or similar mark on the TV.



- 1 VTR 1/2/3/MDP (multi disc player) selector
- 2 Sony VCR/multi disc player operation buttons
- 3 Channel presetting buttons
- 4 ANT/AUX (antenna/auxiliary) button
- 5 MUTING button
- 6 CABLE button
- 7 Input select buttons (TV, VIDEO 1, VIDEO 2, VIDEO 31\*
- 8 Channel number buttons
- 9 DISPLAY button
- 10 ENTER button
- 11 TIME button
- 12 MTS (multichannel TV sound) button
- 13 SRS (sound retrieval system) button\*
- 14 SLEEP button
- 15 POWER button\*
- 16 A/V WINDOW (audio and video adjusting) buttons
- 17 JUMP button
- 18 CH (channel) scan buttons\*
- 19 VOL (volume) control buttons\*
- 20 PICTURE buttons

### 1-2. PRESETTING TV CHANNELS

### To Preset All Receivable Channels Automatically



Receivable channels of this TV are:

VHF: 2-13 UHF: 14-69 Cable: 1-125

To add the channels that could not be preset with automatic programming because their signal strength was too weak, or to erase unnecessary channels.

Follow the steps in "To preset only the desired channels or to erase unnecessary channels" on the next page.

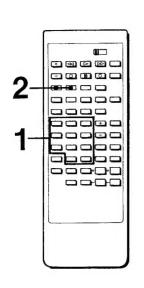
To check preset channels

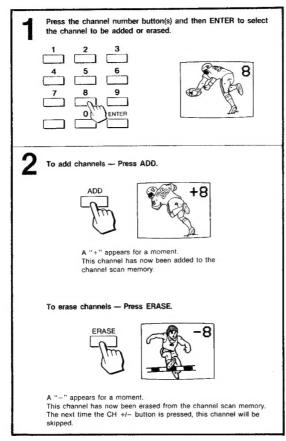
Press CH +/-.

If the indication "VIDEO 1, VIDEO 2, VIDEO 3" is displayed on the screen

Press the TV/VIDEO button on the TV or the TV button on the Remote Commander so that a channel number appears.

### To Preset Only the Desired Channel or to Erase Unnecessary Channels





Repeat steps 1 and 2 for other channels to be added or erased.

### When a VHF or UHF channel is erased

The cable TV channel with the same number is also erased and vice versa.

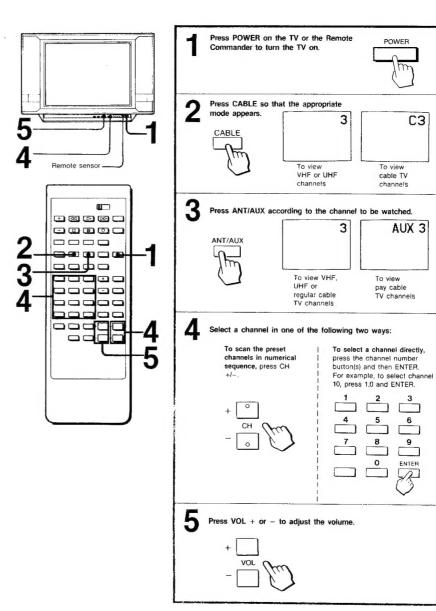
### Cable TV channel chart\*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

Numl	per or	this	TV			1	5	6	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Corre	spone	ding	CATV	chan	nel	A-8	A-7	A-6	A	8	С	D	E	F	G	Н	1	J	K	L	М	N	0	Р	Q
31	32	33	34	35	36	37	38	39			93	94	95	96	97	98	99	100	101	102			123	124	125
В	S	Ť	U	V	w	W+1	W+2	W+3			W+57	W+58	A-5	A-4	A-3	A-2	A-1	W+59	W+60	W+61			W+82	W+83	W+8

Check with your local cable TV company for more complete information on the available channels.

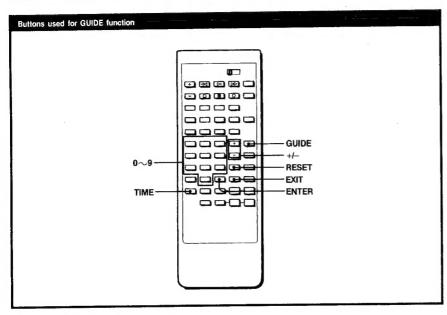
\*The designation of the cable TV channels conforms to the EIA/NCTA recommendation.



-6

## 1-4. USING THE GUIDE FUNCTION

The GUIDE function calls up the on-screen menu and instructions on how to set the current time, timer, channel

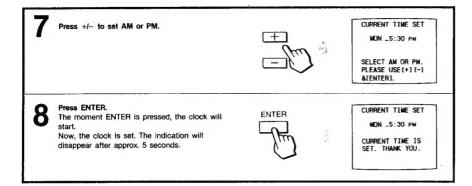


- All setting will be erased from the unit's memory if the unit is unplugged, or if a power failure occurs.
   The ON/OFF TIMER and CHANNEL BLOCK will operate
- only if the clock is set correctly.

### Setting the Clock

Example: To set the clock to 5:30 PM, Monday.

1	Press GUIDE. Press repeatedly until "CURRENT TIME SET" turns red.	GUIDE	GUIDE CURRENT TIME SET ON/OFF TIMER CHANNEL BLOCK
2	Press ENTER.	ENTER	CURRENT TIME SET  SUN
3	Press +/- until the desired day of the week appears.	=	CURRENT TIME SET  MON AM  SELECT TODAY'S DAY. PLEASE USE (+) (-) &(ENTER).
4	Press ENTER.  If the time is already set, the current set time will appear. To clear these numbers, press any number.	ENTER	CURRENT TIME SET  MON AM  SET THE CURRENT TIME. PLEASE USE [0-9] &[ENTER].
5	Press 0-9 to set the desired time. (For 5:30, press 0,5,3,0)		CURRENT TIME SET  MON 05:30 AM  SET THE CURRENT TIME. PLEASE USE [0-9] &[ENTER].
6	Press ENTER.	ENTER	CURRENT TIME SET  MON 05:30 AM  SELECT AM OR PM. PLEASE USE[+][-] &[ENTER].



### To restore the normal picture

Press EXIT.

### To clear the current time setting

Display the "CURRENT TIME SET" page and press RESET, then EXIT.

To reset the setting Display the "CURRENT TIME SET" page and press RESET, then repeat steops 3 to 8.

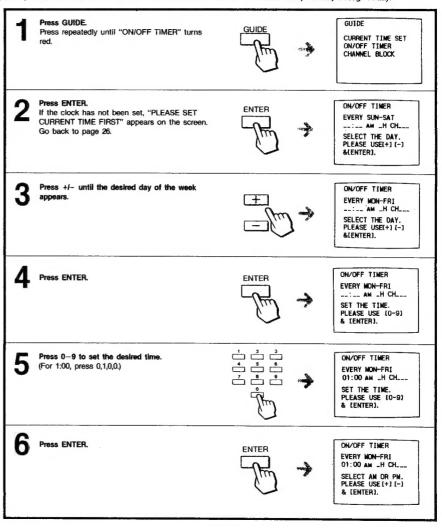
To display the current time Press TIME.

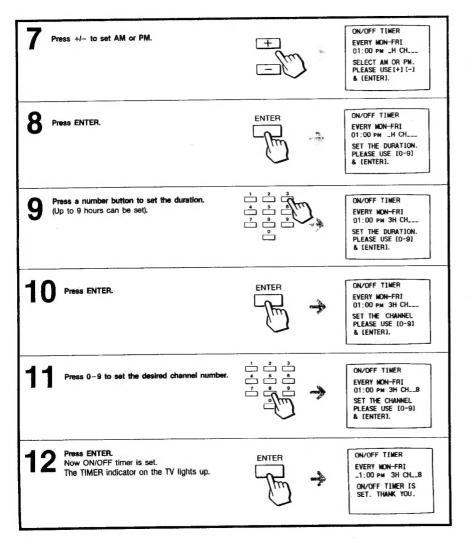
. The internal clock of this TV operates on a 12-hour cycle. If a 24-hour cycle number is entered, it will be cleared when ENTER is pressed.

12:00 AM stands for midnight. 12:00 PM stands for noon.

### Setting the ON/OFF Timer

ON/OFF TIMER allows the program of your choice to appear on the screen at the desired time. Example: Set the timer to turn on the TV to channel 8 at 1:00 PM for 3 hours every Monday through Friday.

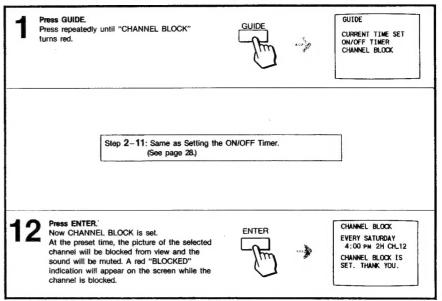




### Setting the Channel Block

CHANNEL BLOCK prevents a channel from appearing on the screen for preset hours. We suggest you use this function to prevent children from watching undersirable

Example: Set the CHANNEL BLOCK at 4:00 PM (for 1 hour), every Saturday, at channel 12.



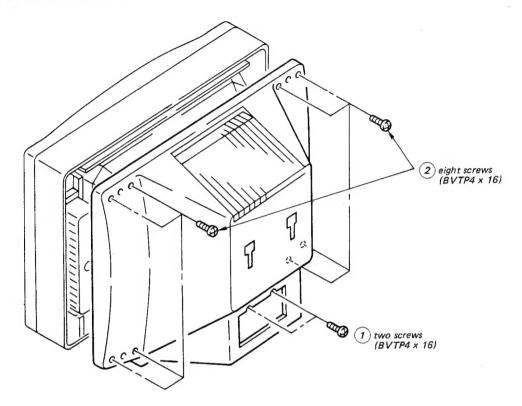
To restore the normal picture Press EXIT.

To clear the setting Display the "CHANNEL BLOCK" page and press RESET, then

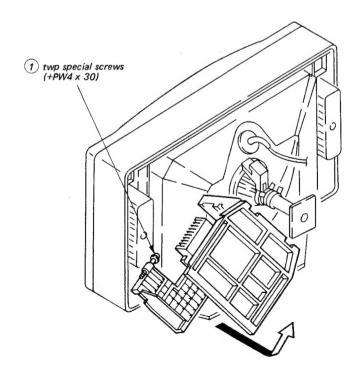
Display the "CHANNEL BLOCK" page and repeat steps from the beginning.

# SECTION 2 DISASSEMBLY

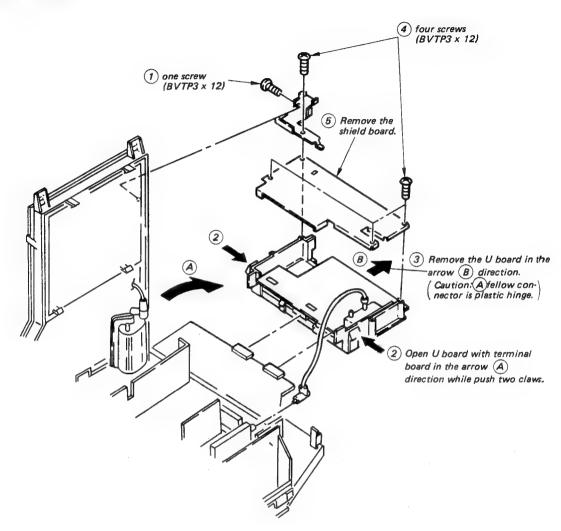
## 2-1. REAR COVER REMOVAL

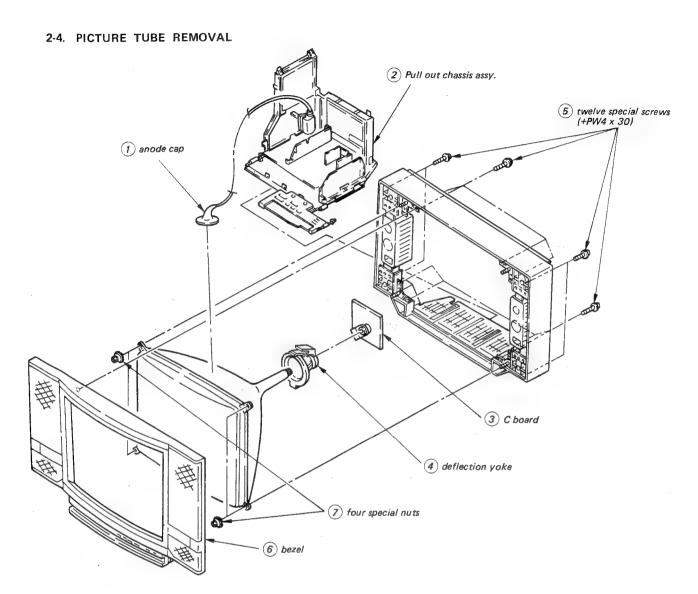


## 2-2. SERVICE POSITION



### 2-3. U BOARD REMOVAL





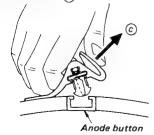
### 2-5. REMOVAL OF ANODE CAP

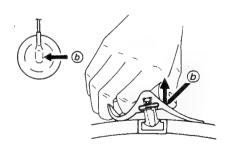
# ANODE CAP REMOVAL

### • Removing Procedures



Turn up one side of the rubber cap in the direction indicated by the arrow (a).





- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow (b).
- 3 When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ©.

# SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The control and switch below should be set as follows unless otherwise noted:

PICTURE control ..... normal BRIGHTNESS control ..... normal

Perform the adjustments in order as follows:

- 1. Beam Landing
- 2. Convergence
- 3. Focus
- 4. White Balance

Note: Test Equipment Required.

- 1. Color Bar Pattern Generator
- 2. Degausser
- 3. DC Power Supply
- 4. Digital multimeter

### Preparation:

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

### 3-1. BEAM LANDING

- 1. Input a raster signal with the pattern generator.
- Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Fig. 2.
- Turn the raster signal of the pattern generator to red.
- Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly.
- 5. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig. 1.)
- 6. Switch over the raster signal to blue and green and confirm the condition.
- 7. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
- 8. When landing at the corners is not right, adjust by using the magnet. (Fig. 4.)

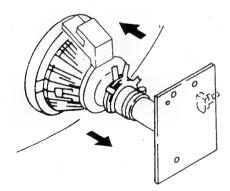


Fig. 1.

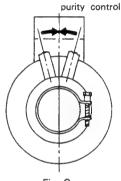


Fig. 2.

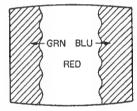
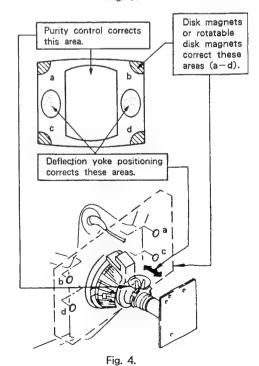


Fig. 3.

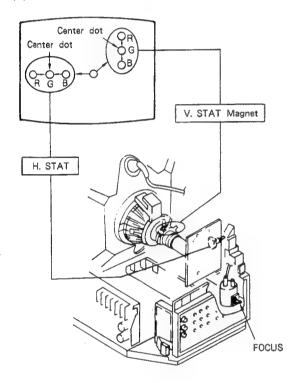


### 3-2. CONVERGENCE

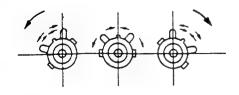
### Preparation:

- Before starting, perform FOCUS, H. SIZE, V. LIN and V. SIZE adjustments.
- · Set BRIGHTNESS control to minimum.
- · Feed in the dot pattern.

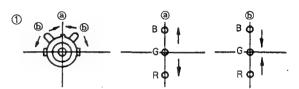
### (1) Horizontal and Vertical Static Convergence

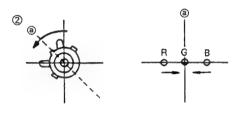


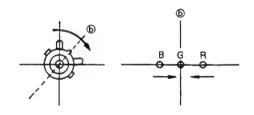
- Adjust H. STAT VR to coincide red, green and blue dots on the center of screen. (Horizontal movement)
- Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen. (Vertical movement)
- If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.

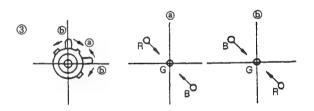


4. When the V. STAT magnet is moved in the direction of arrow (a) and (b), red, green and blue dots move as shown below.



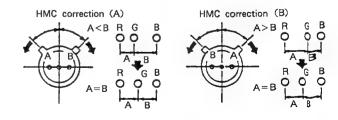




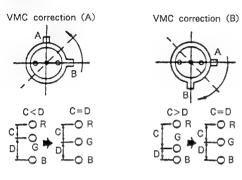


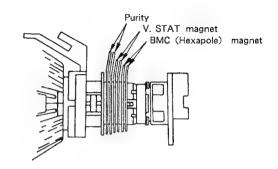
If the blue dot do not coincide with red and green dots, perform following steps.

- HMC and VMC correction for BMC (Hexapole)
   Magnet
- HMC (Horizontal, Mis, convergence) correction and motion of the Electron Beam with the BMC Magnet.



 VMC (Vertical, Mis, convergence) correction and motion of the Electron Beam with the BMC Magnet.



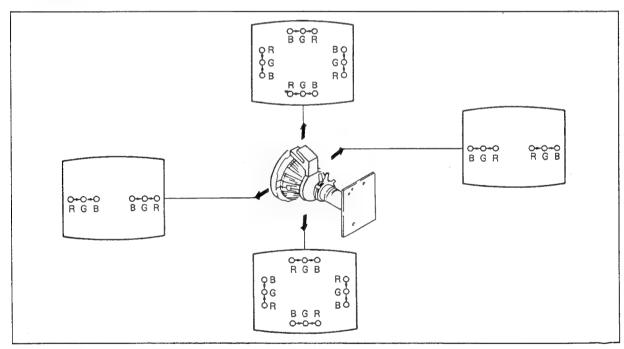


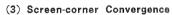
### (2) Dynamic Convergence Adjustment

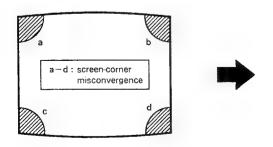
### Preparation:

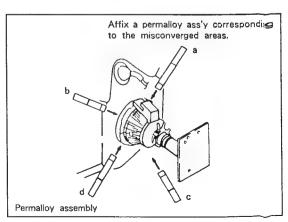
- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
- 1. Slightly loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.

- Move the deflection yoke for best convergence as shown below.
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.









### 3-3. FOCUS

- 1. Tune in an off-air signal.
- 2. PICTURE → control to normal.
- 3. Adjust the focus VR on A board so that the focus at the center of the screen is optimum.

A magenta ring will appear if the focus is adjusted only in the center of the screen. Adjust evenly throughout the entire screen.

# 3-4. G2, WHITE BALANCE ADJUSTMENTS (Using the remote commander)

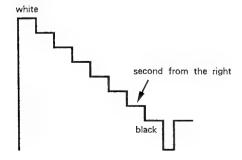
- 1. CUT OFF (G2) ADJUSTMENT (RV701)
  - 1) Set the PICTURE and BRIGHT to normal.
  - 2) Confirm G1 voltage within 30.0  $\pm 5$  V.
  - Apply DC voltage of 180 V to the cathodes of R, G and B from DC stabilized power source.
  - While watching the picture, adjust the G2 volume (RV701) immediately before the flyback line disappears.

### 2. WHITE BALANCE ADJUSTMENT

- 1) Set to service mode.
- 2) Press VIDEO → RESET to normal.
- 3) Receive an entire white signal.
- 4) Set the PICTURE to minimum.
- 5) Select S BRT with 1 and 4, and then set the level to minimum with 3 and 6.
- 6) Select G CUT and B CUT with 1 and 4, and adjust the level with 3 and 6 for the best white balance.
- 7) Set the PICTURE to maximum.
- 8) Select G AMP and B AMP with 1 and 4, and adjust the level with 3 and 6 for the best white balance.

### 3. SUB BRIGHT ADJUSTMENT

- 1) Set to service mode.
- 2) Receive a stairs wave of black and white from the pattern generator.
- 3) BRIGHT ..... normal PICTURE ..... minimum
- 4) Select S BRT with 1 and 4, and adjust SUB BRIGHT level with 3 and 6 so that the stripe second from the right is dimly lit.



# RESOR, CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with  $\square$  on the schematic diagram).

IC301, IC653, PM501, D539, C556, R556, R564, R567, R663, T500

- 1. Preparation before confimation
  - Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHT controls to maximum.
  - Confirm that the voltage of the check terminal of pin (2) of F-5 (F BOARD) is more than 127.0 V DC when the set is operating normally with 120.0 ±2.0 V AC supply.
- 2. Hold-down operation confirmation
  - 1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to 1620  $\pm$ 50  $\mu$ A with PICTURE and BRIGHT etc controls.
  - 2) Apply DC voltage of over 140.0 V gradually to the check terminal of pin ② of F-5 (F BOARD) via 1T40 from the DC stabilized power source. Confirm that the minimum voltage is less than 145.0 V DC whereby the raster disappears during operation of hold-down circuit.
    - NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
  - 3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to 150  $\pm 20$   $\mu$  A with PICTURE and BRIGHT etc controls.
  - 4) Apply DC voltage of over 140.0 V gradually to the check terminal of pin ② of F-5 (F BOARD) via 1T40 from the DC stabilized power source. Confirm that the minimum voltage is less than 145.0 V DC whereby the raster disappears during operation of hold-down circuit.

NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R567 (a component marked with  $\blacksquare$ ).

R549, CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with an on the schematic diagram).

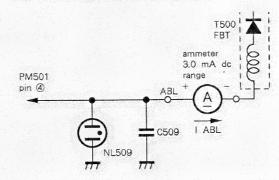
IC301, PM501, R549, R564

- 1. Preparation before confimation
  - 1) Remove R663 on the F board and connect a variable resistor (RV1: about 4.7 k $\Omega$  to 10 k $\Omega$ ) between pin 1 of IC653 and B+ line.
  - Supply 120 ±2.0 V AC to with variable autotransformer.
- 2. Hold-down operation confirmation
  - 1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to 1620  $\pm$ 50  $\mu$ A with PICTURE and BRIGHT etc controls.
  - Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 142.5 V DC whereby the raster disappears during operation of hold-down circuit.
    - NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
  - 3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to 150  $\pm$ 20  $\mu$ A with PICTURE and BRIGHT etc controls.
  - 4) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 144.0 V DC whereby the raster disappears during operation of hold-down circuit.

NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R549 (a component marked with  $\blacksquare$ ).

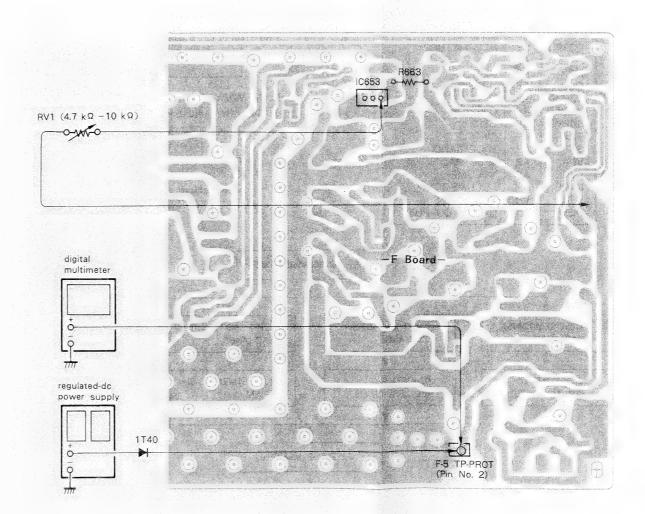


\*Use a digital multimeter whose input impedance over 100 M $\Omega$  when confirming the voltage of the protector terminal.

### B+ VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC653 and R663.

- 1. The B+ voltage confirmation
  - Supply 130 ± 1.0 V AC to with variable autotransformer.
  - 2) Receive entirely monoscope signals.
  - Set the PICTURE control and the BRIGHT control into initial reset.
  - 4) Confirm the voltage of TP91 is less than 137.0 V DC.
  - 5) If step 4) is not satisfied, replace IC653 and R663 repeat above steps.



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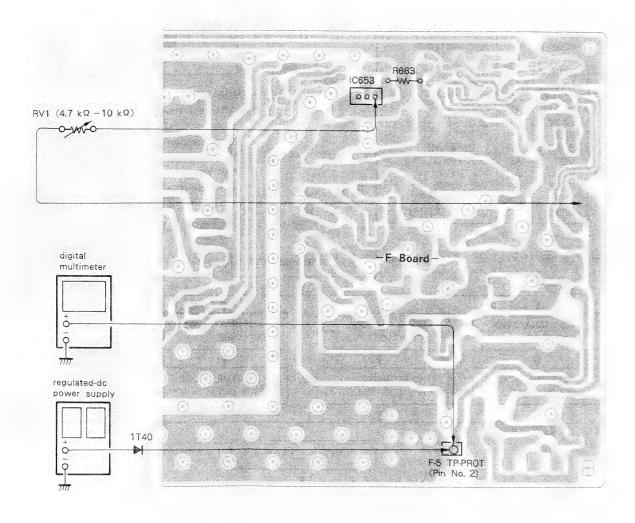
ince

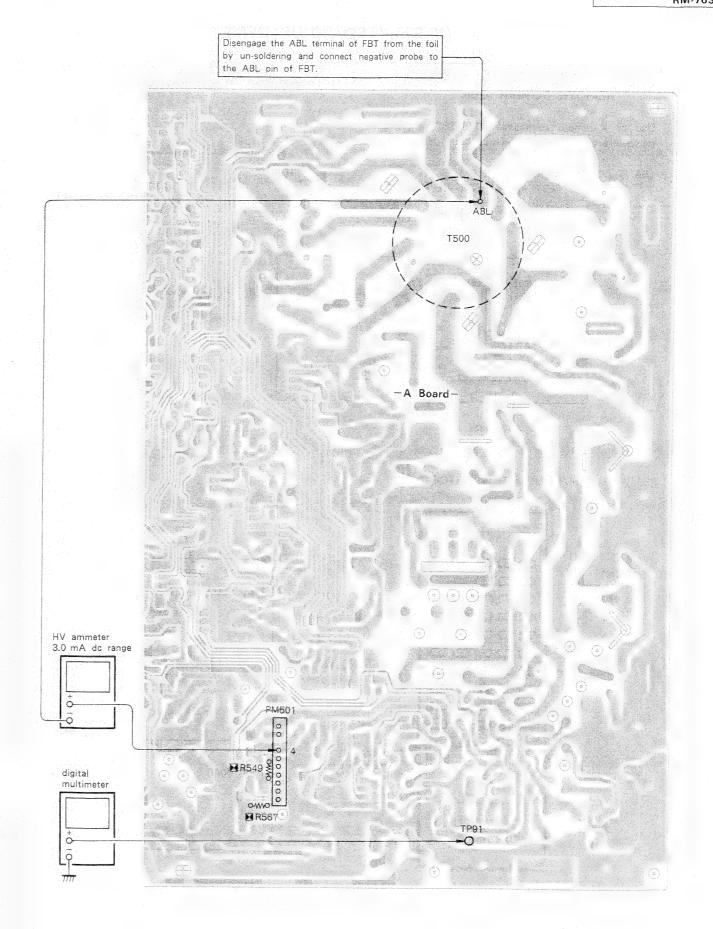
) of

# B+ VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC653 and R663.

- 1. The B+ voltage confirmation
  - 1) Supply 130 ± 0 V AC to with variable autotransformer.
  - 2) Receive entirely monoscope signals.
  - Set the PICTURE control and the BRIGHT control into initial reset.
  - 4) Confirm the voltage of TP91 is less than 137.0 V DC.
  - 5) If step 4) is not satisfied, replace IC653 and R663 repeat above steps.





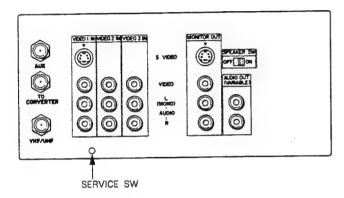
# SECTION 5 CIRCUIT ADJUSTMENTS

# 5-1. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

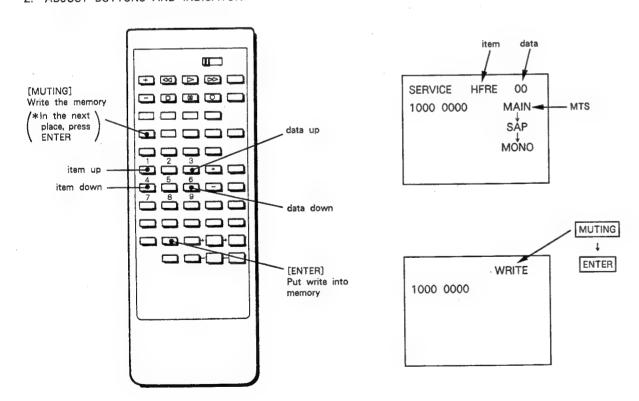
Use of a remote commander (RM-763) can be performed all circuit adjustments about this model.

### [BASIC ADJUSTMENTS]

- 1. METHOD OF SETTING THE SERVICE MODE
  - Press POWER button on the remote commander while pressing the switch on the rear of the set.



### 2. ADJUST BUTTONS AND INDICATOR



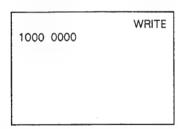
### 3. AN ITEM OF ADJUSTMENTS

ITEM	NAME REGISTER					
HFRE VFRE VPOS VSIZ VLIN VSCO HPOS HSIZ PAMP CPIN PPHA VCOM GAMP BAMP GCUT BCUT CROM SPIX SHUE SCOL SBRT RGBP	VP V	H-FREQUENÇY V-FREQUENCY V-SHIFT V-SIZE V-LINEARITY S-CORRECTION H-PHASE H-SIZE PIN AMP. CORNER PIN PIN PHASE V-COMP. GREEN AMP. BLUE AMP. GREEN CUTOFF BLUE CUTOFF CHROMA TRAP PICTURE HUE COLOR BRIGHT RGB PICTURE				
MPX FILO DEEM STEV SAPV PILO SEP VD LVOL RVOL SHAR DISP	AP AP AP AP AP AP AP AP	ATT I1 I2 OSC1 OSC2 PILOT WIDE BAND SPECTRAL VOLUME-L VOLUME-R SHARPNESS ③ PWM OUTPUT				

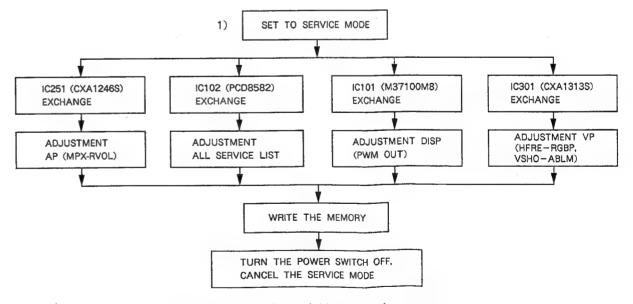
4. METHOD OF CANCELLATION FROM SERVICE

Set to standby condition (Press POWER button on the commander). In the next place, press POWER button again, hereupon it becomes TV

- 5. METHOD OF WRITE FOR MEMORY
  - 1) Set to service mode.
  - 2) Press 1 (UP) and 4 (DOWN), select an item of adjustments.
  - 3) Press MUTING button to indicate WRITE (RED) on screen.
  - Press ENTER button to write for memory. (At this time, WRITE (YELLOW) is indicated on screen.)



- 6. MEMORY WRITE CONFIRMATION METHOD
  - After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
- Turn the power switch ON and set to service mode.
- Call the adjusted items again, confirm they were adjusted.
- 7. ADJUSTMENT WHEN REPLACING IC



NOTE: If service mode is canceled before write for memory, the adjustment data is not recorded. Please write for memory certainly after adjustment.

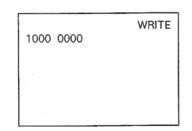
## 3. AN ITEM OF ADJUSTMENTS

,		
ITEM	N.	AME REGISTER
HFRE VFRE VPOS VSIZ VLIN VSCO HPOS HSIZ PAMP CPIN PPHA VCOM GAMP BAMP GCUT CROM SPIX SHUE SCOL SBRT RGBP	VP VP VP VP VP	H-FREQUENCY V-FREQUENCY V-FREQUENCY V-SHIFT V-SIZE V-LINEARITY S-CORRECTION H-PHASE H-SIZE PIN AMP. CORNER PIN PIN PHASE V-COMP. GREEN AMP. BLUE AMP. GREEN CUTOFF BLUE CUTOFF CHROMA TRAP PICTURE HUE COLOR BRIGHT RGB PICTURE
MPX FILO DEEM STEV SAPV PILO SEP VD LVOL RVOL SHAR DISP	AP AP AP AP AP AP AP AP AP VP	ATT I1 I2 OSC1 OSC2 PILOT WIDE BAND SPECTRAL VOLUME-L VOLUME-R SHARPNESS ③ PWM OUTPUT

4. METHOD OF CANCELLATION FROM SERVICE
MODE

Set to standby condition (Press POWER button on the commander). In the next place, press POWER button again, hereupon it becomes TV mode

- 5. METHOD OF WRITE FOR MEMORY
  - 1) Set to service mode.
  - 2) Press 1 (UP) and 4 (DOWN), select an item of adjustments.
  - Press MUTING button to indicate WRITE (RED) on screen.
  - Press ENTER button to write for memory. (At this time, WRITE (YELLOW) is indicated on screen.)



- 6. MEMORY WRITE CONFIRMATION METHOD
  - 1) After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
  - Turn the power switch ON and set to service mode.
  - 3) Call the adjusted items again, confirm they were adjusted.
- 7. ADJUSTMENT WHEN REPLACING IC

SET TO SERVICE MODE 1) IC301 (CXA1313S) (C102 (PCD8582) IC101 (M37100M8) IC251 (CXA1246S) EXCHANGE **EXCHANGE EXCHANGE** EXCHANGE ADJUSTMENT VP ADJUSTMENT ADJUSTMENT DISP ADJUSTMENT (HFRE-RGBP, ALL SERVICE LIST (PWM OUT) AP (MPX-RVOL) VSHO-ABLM) WRITE THE MEMORY TURN THE POWER SWITCH OFF, CANCEL THE SERVICE MODE

NOTE: If service mode is canceled before write for memory, the adjustment data is not recorded. Please write for memory certainly after adjustment.

2) The following first setting should always be performed when replacing the IC102 (PCD8582).

ITEM	NAME	REGISTER	ADJUSTMENT
VSMO	VP	VSMO	0
AFC	VP	AFC 1.0	0
REF	VP	REF 1.0	2
ROFF	VP	OFF NR	1
GOFF	VP	OFF NG	1
BOFF	VP	OFF NB	1
ABLM	VP	ABLM	1
TEST	AP	Т	0
DRGB	VP	DRGB	1

\* Please write the memory each items by  $\boxed{\text{MUTING}} \rightarrow \boxed{\text{ENTER}}$ .

### 5-2. CIRCUIT ADJUSTMENTS

### RF AGC ADJUSTMENT (IF BLOCK VR)

- 1) Receive a color-bar signal.
- Adjust AGC VR of IF201 so that snow noise and cross-modulation disappear from the picture.
- 3) Confirm them at every channel.

### H. FREQUENCY ADJUSTMENT

- 1) Set to service mode.
- 2) Receive a color-bar signal.
- 3) Connect a frequency counter to base of Q502.
- 4) Call the item of AFC, set to 3 level (free run).
- 5) Select HFRE with 1 and 4.
- 6) Adjust 3 and 6 to the 15,735 ±60 Hz level.
- 7) Call the item of AFC again, adjust the level "00".
- 8) Write the memory by MUTING → ENTER.

### V. FREQUENCY ADJUSTMENT

- 1) Set to service mode.
- 2) Receive an off-air signal (VIDEO IN → no signal).
- 3) Connect the frequency counter across pin 6 of A-81 connector and ground.
- 4) Select VFRE with 1 and 4.
- 5) Adjust 3 and 6 to 55 ±1 Hz.
- Write the memory by MUTING → ENTER.

### CHROMA TRAP ADJUSTMENT

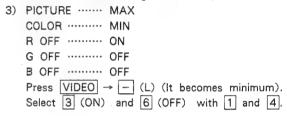
- 1) Set to service mode.
- Receive a color-bar signal.

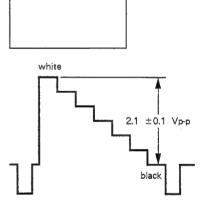
- 3) Select NOTCH (VIDEO condition), turn "ON" by +. And then set the COLOR VR to maximum setting and SHARPNESS control to center.
- 4) Connect an oscilloscope to TP47R (R OUT) on C board.
- 5) Select C ROM with 1 and 4, and then adjust 3.58 MHz (CHROMA) ingredient is minimum with 3 and 6.
- 6) Write the memory by MUTING → ENTER
- Set NOTCH to OFF, and make normal condition with VIDEO → RESET.

### SUB CONTRAST ADJUSTMENT

- 1) Set to service mode.
- 2) Receive a color-bar signal. (75 IRE)

SERVICE ROFF 01-





- Connect an oscilloscope to TP47R (R OUT) on C board.
- 5) Adjust  $\boxed{3}$  and  $\boxed{6}$  to the 2.1  $\pm$ 0.1 Vp-p level by select SPIX with  $\boxed{1}$  and  $\boxed{4}$ .
- 6) Write the memory by MUTING → ENTER.
- 7) Return normal after adjustment.

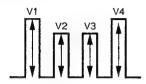
G OFF ..... ON
B OFF .... ON
COLOR .... CENTER

PICTURE ..... 80%

### SUB HUE, SUB COLOR ADJUSTMENT

- 1) Receive a color-bar signal.
- 2) Press VIDEO → RESET to normal.

- 3) Set to service mode.
- 4) Connect an oscilloscope TP47B (B OUT) on C
- 5) Adjust 3 and 4 to become V1=V4 and V2=V3 by select to SHUE and SCOL with 1 and 4.



6) Write for memory by MUTING → ENTER.

### V. SIZE ADJUSTMENT

- 1) Set to service mode.
- 2) Receive a cross-hatch signal.
- 3) Adjust 3 and 6 to become best vertical size by select to VSIZ with 1 and 4.
- 4) Write for memory by MUTING → ENTER.

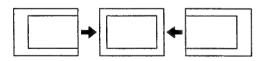
### H. SIZE ADJUSTMENT

- 1) Receive a cross-hatch signal.
- 2) Press VIDEO → RESET to normal.
- 3) Set to service mode.
- 4) Adjust 3 and 6 to become best horizontal size by select to HSIZ with 1 and 4.
- 5) Write for memory by MUTING → ENTER.

### H. CENTER ADJUSTMENT

Note: Act this adjustment after H. FREQ adjustment.

- 1) Receive a cross-hatch signal.
- 2) Press VIDEO → RESET to normal.
- 3) Set to service mode.
- 4) Select to HPOS with 1 and 4.
- 5) Adjust 3 and 6 to become best picture.

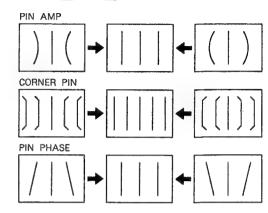


6) Write for memory by MUTING → ENTER.

### PIN AMP, CORNER PIN AND PIN PHASE ADJUSTMENT

- 1) Receive a cross-hatch signal.
- 2) Press VIDEO → RESET to normal.
- 3) Set to service mode.
- 4) Select to PAMP, CPIN and PPHA with 1 and 4.

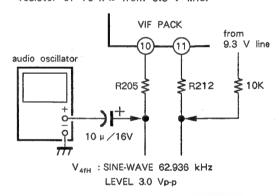
5) Adjust 3 and 6 to become best picture.



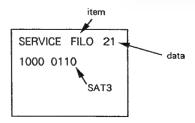
6) Write for memory by MUTING → ENTER.

## FILTER ADJUSTMENT

- 1) Set to service mode.
- Select to TEST with 1 and 4, set the data to "1". Then select MPX and make data to "08".
- 3) Connect an audio oscillator to R205 via chemical capacitor (10  $\mu$  F/16 V) and apply frequency of V<sub>4fH</sub>. And then, apply DC volttage to R212 via resistor of 10 k  $\Omega$  from 9.3 V line.

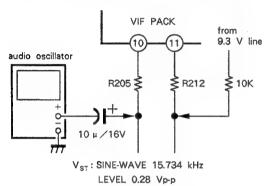


- 4) make the data "00" by select to FILO with 1 and 4. And then, send up the data gradually with press of 6, set the data to D1 before SAT3 changes 1 from 0.
- 5) Send up the data gradually, set the data to D2 when SAT3 changes 0 from 1.
- 6) Adjust the data of FILO to  $\frac{D1 + D2}{2}$
- 7) Write for memory by MUTING → ENTER.

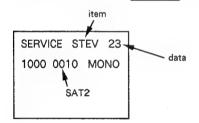


### ST VCO ADJUSTMENT

- 1) Set to service mode.
- 2) Select to TEST with 1 and 4, set the data to "1". And then press MTS to MONO.
- 3) Select to MPX, set the data to "08".
- 4) Connect an audio oscillator to R205 via chemical capacitor (10  $\mu$  F / 16 V) and apply frequency of Vst. And then, apply DC voltage to R212 via register of 10 k $\Omega$  from 9.3 V line.



- 5) Select STEV with 1 and 4, set the data to "00" with 6. And then, send up the data gradually, set the data D1 before SAT2 changes 0 from 1.
- 6) Send up the data gradually, set the data to D2 when SAT2 changes 1 from 0.
- 7) Adjust the data of STEV to  $\frac{D1 + D2}{2}$
- 8) Write for memory by MUTING -> ENTER.



### MPX IN LEVEL ADJUSTMENT

- 1) Set to service mode.
- Select to TEST with 1 and 4, set the data to "0" with 6. And then press MTS to MONO.
- 3) Select to MPX with 1 and 4, set the data to "08" with 3 and 6.
- 4) Write for memory by MUTING → ENTER.

### PILOT CANCEL ADJUSTMENT

- 1) Set to service mode.
- 2) Select to TEST with 1 and 4, set the data to "0" with 6. And then press MTS to MAIN.
- 3) Select to PILO with 1 and 4, set the data to "08" with 3 and 6.
- 4) Write for memory by MUTING → ENTER

### SAP VCO fo ADJUSTMENT

- 1) Set to service mode.
- 2) Receive a stereo broadcast including SAP.
- 3) Select to TEST with 1 and 4, set to the data to "0". And then, press MTS to MAIN.
- Connect a digital multimeter to pin ① of A-23 connector and this voltage agree upon V1.
- Press MTS to SAP and this voltage agree upon V2.
- 6) Select to SAPV with 1 and 4, adjust 3 and 6 to become V2=V1 ±0.03 V DC.
- 7) Write for memory by MUTING → ENTER.

### SEPARATION ADJUSTMENT

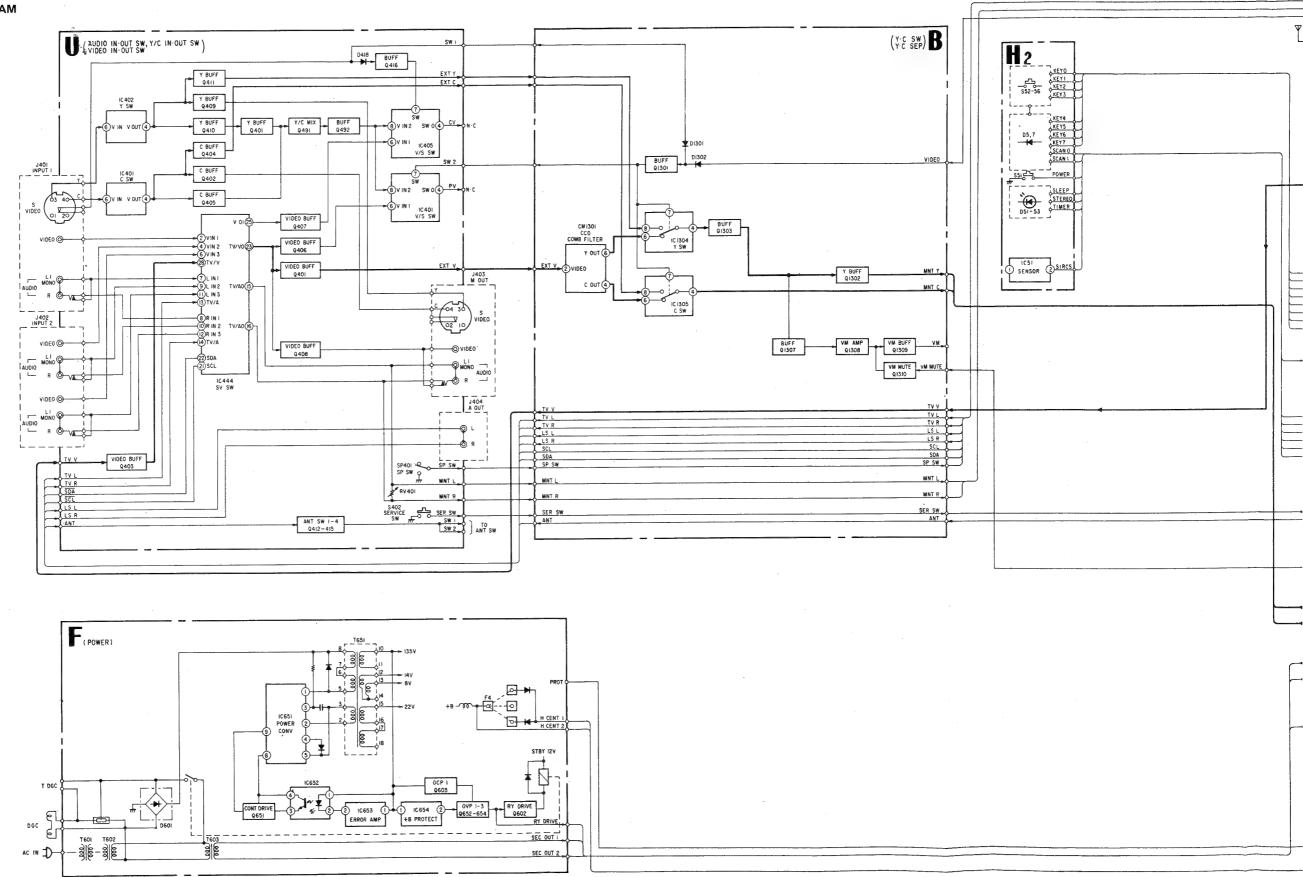
- 1) Set to service mode.
- 2) Press MTS to MAIN, and receive a monaural broadcast.

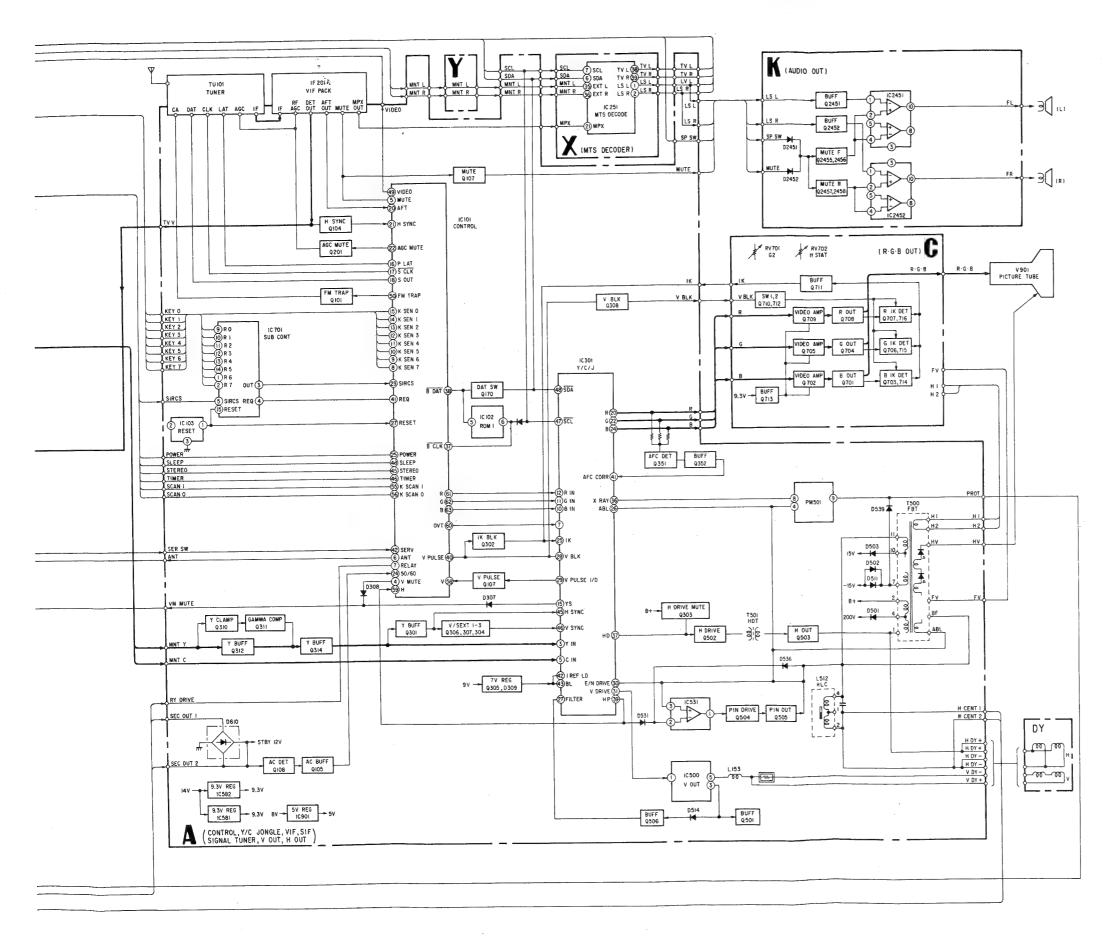
In the next place, receive a stereo broadcast.

3) Select to SEP and VD with 1 and 4, adjust 3 and 6 to become to obtain stereo effects.

SECTION 6
DIAGRAMS

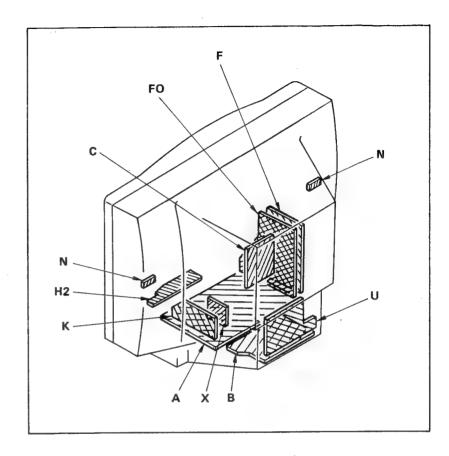
## 6-1. BLOCK DIAGRAM



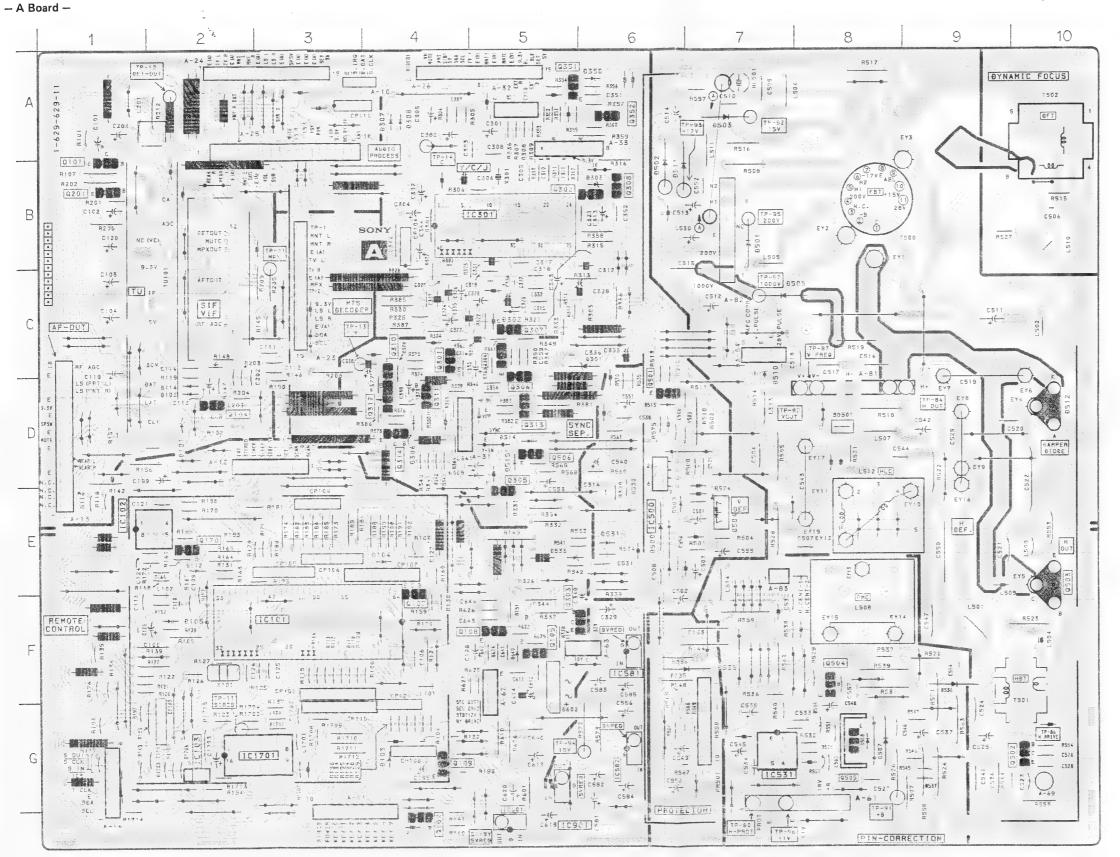


# **MEMO**

## 6-2. CIRCUIT BOARDS LOCATION

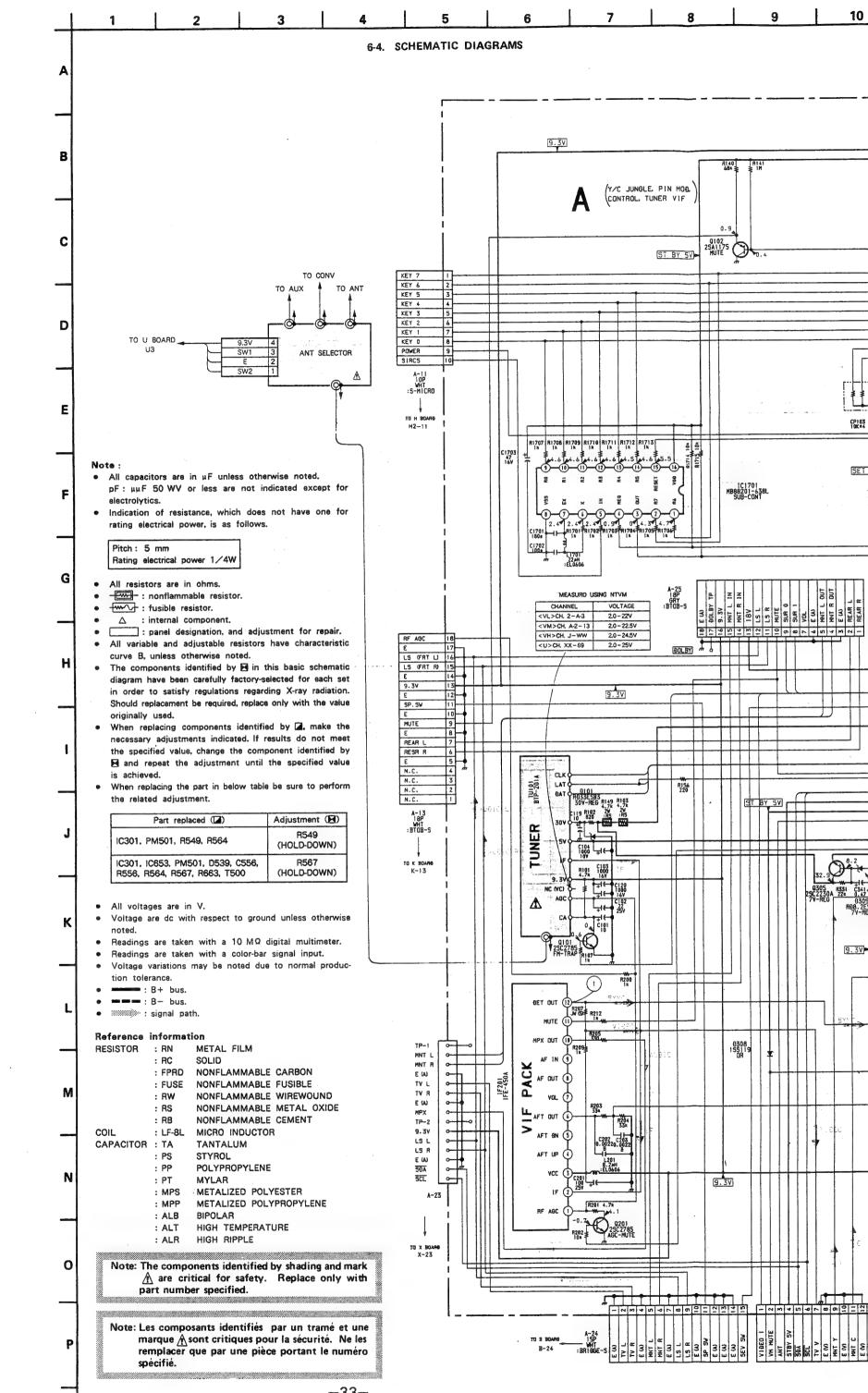


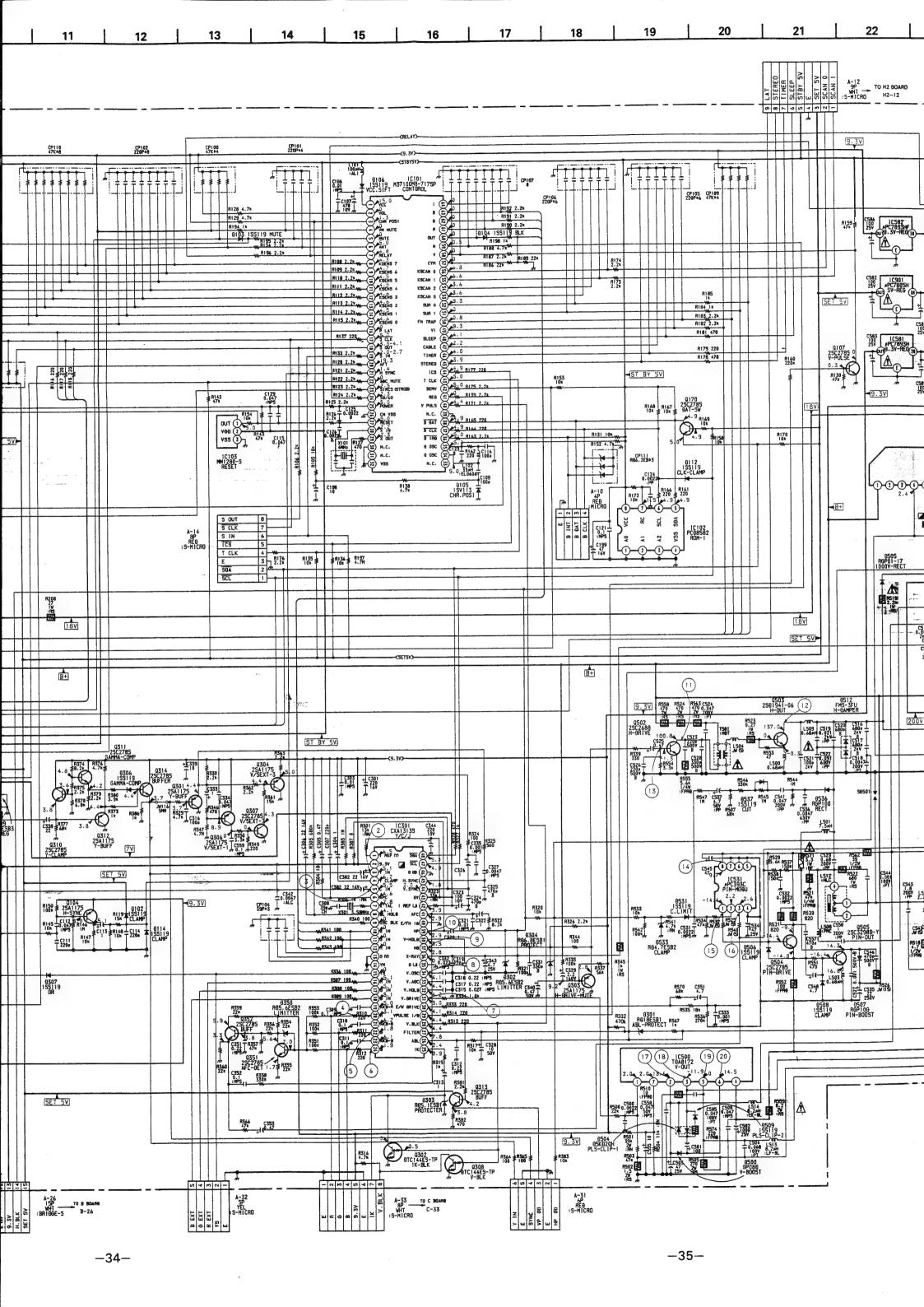


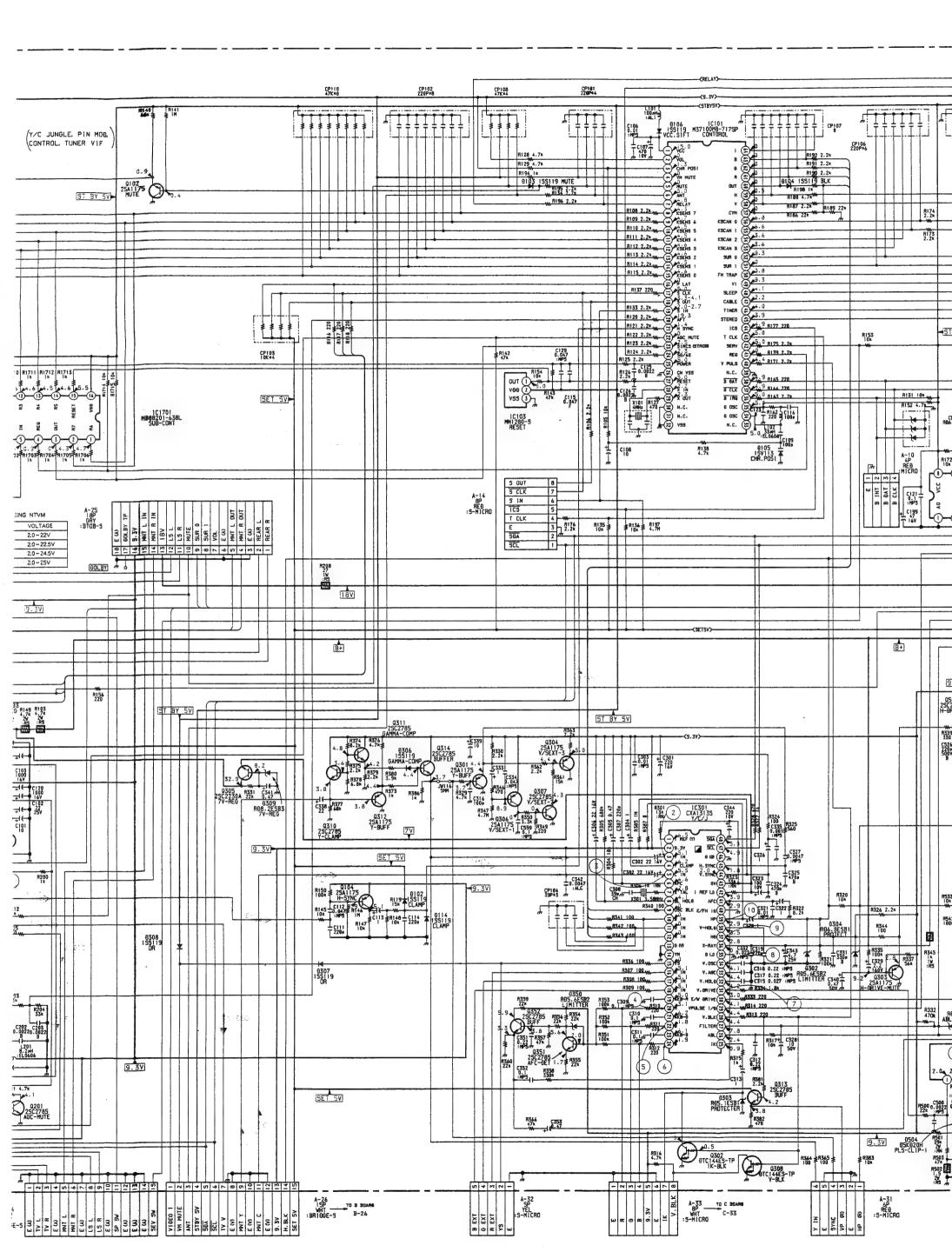


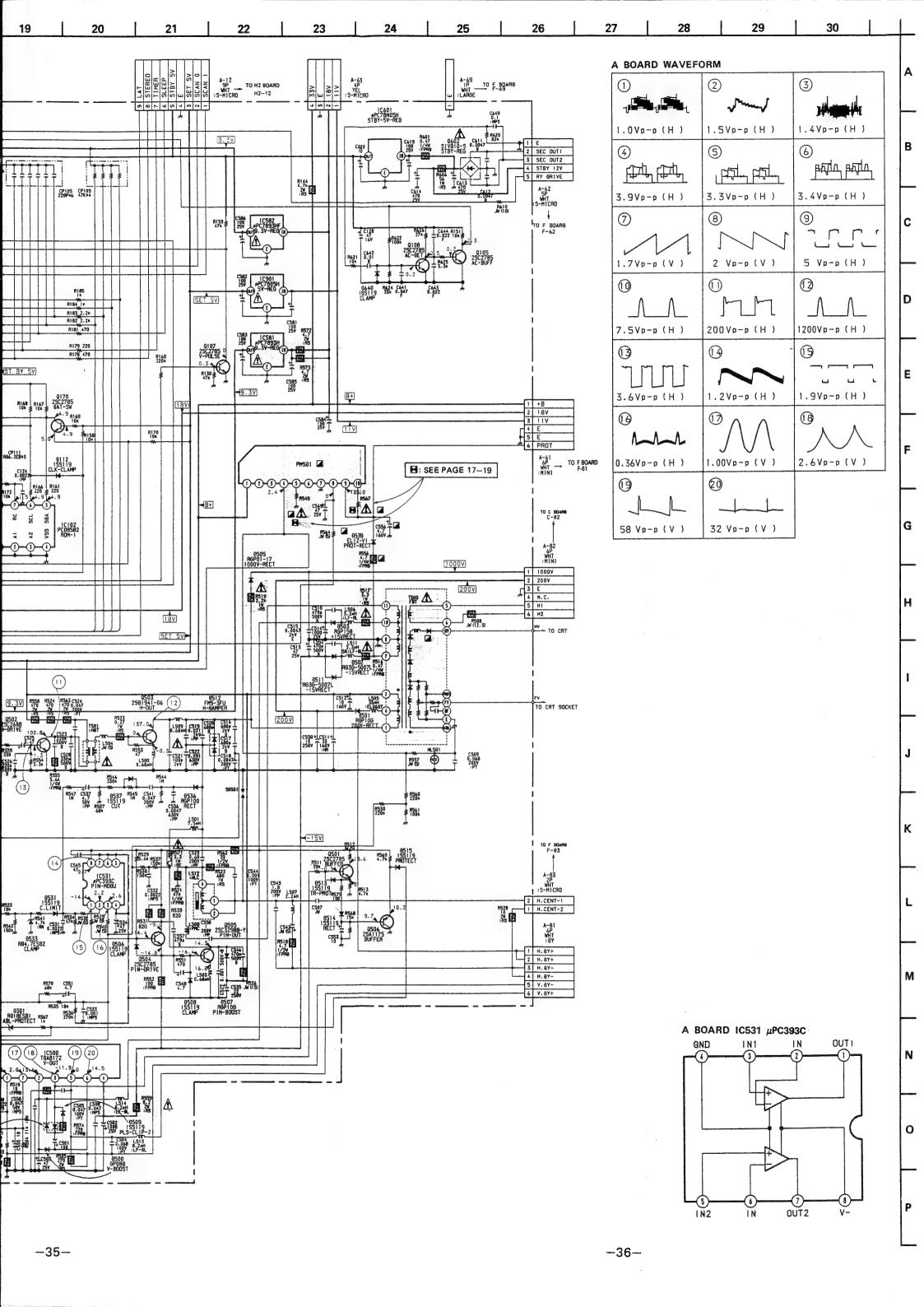
### A BOARD LOCATION

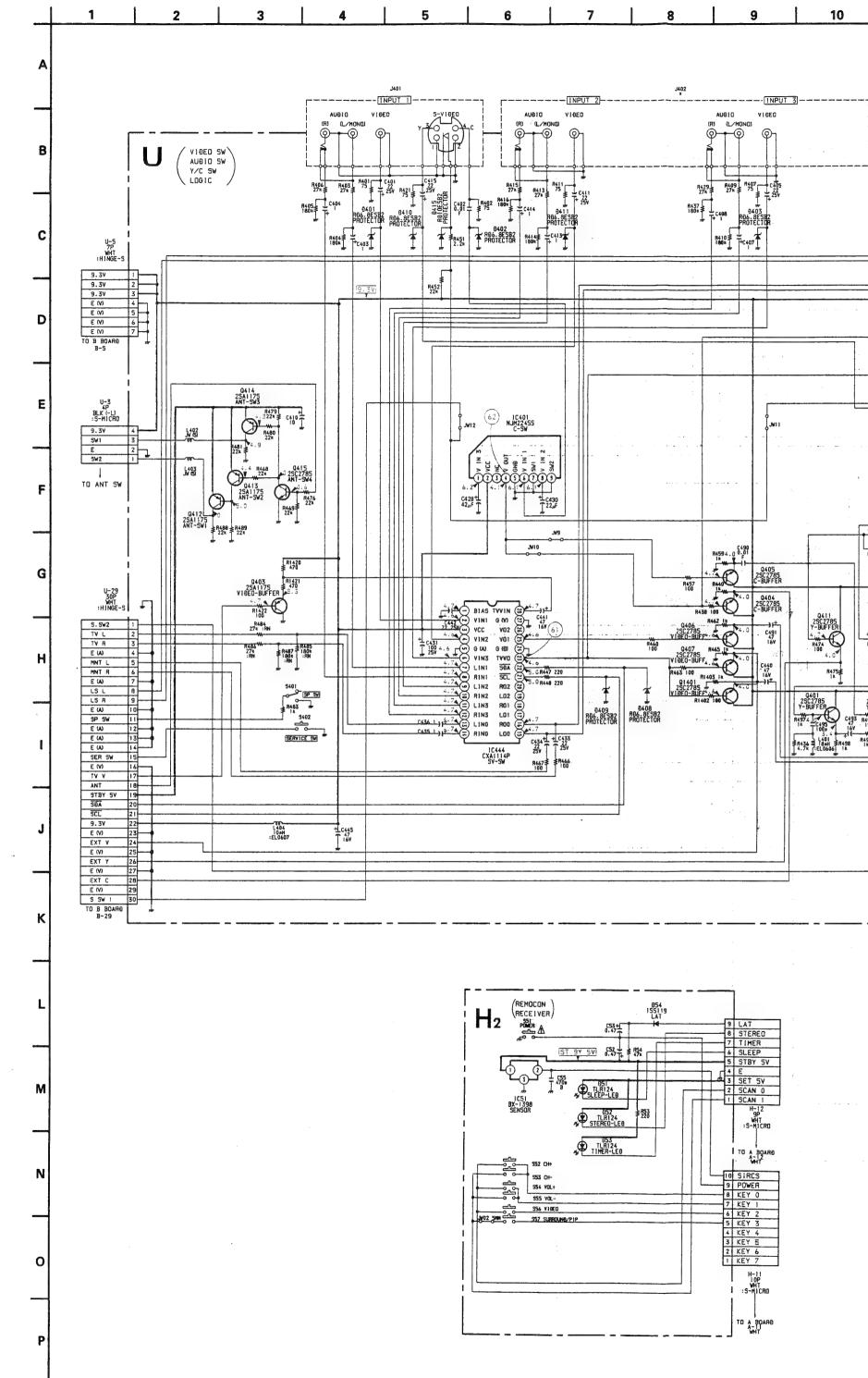
A BOARD	LUCATIO	JN	
IC101 IC102 IC103 IC301 IC500 IC531 IC581 IC582 IC601 IC901 IC1701	F-3 E-2 G-2 B-5 E-6 G-7 F-6 G-6 H-5 G-3	### ##################################	E-4 F-2 E-2 D-6 C-5 B-6 D-4 A-4 D-6 E-7 B-6 B-6
TRANS ]  0101 0102 0104 0105 0107 0108 0170 0201 0301 0302 0303 0304 0305 0306 0307 0308 0310 0311 0312 0313 0314 0351 0352 0501 0502 0503 0504 0505 0506	STOR  B-1 H-4 D-2 F-5 E-1 C-4 B-6 C-5 E-5 C-5 C-6 C-1 D-4 D-4 D-4 D-4 D-6 G-10 F-8 G-8 D-5	D503 D504 D505 D506 D507 D508 D509 D511 D512 D513 D514 D533 D536 D537 D536 D539 D602 D640	A-7 E-7 G-8 G-8 E-7 D-6 D-5 E-9 F-5 F-5 F-5 F-5
ÐIO	ÐE		
Ð101 Ð102 Ð103	Ð-2 Ð-2 G-4		

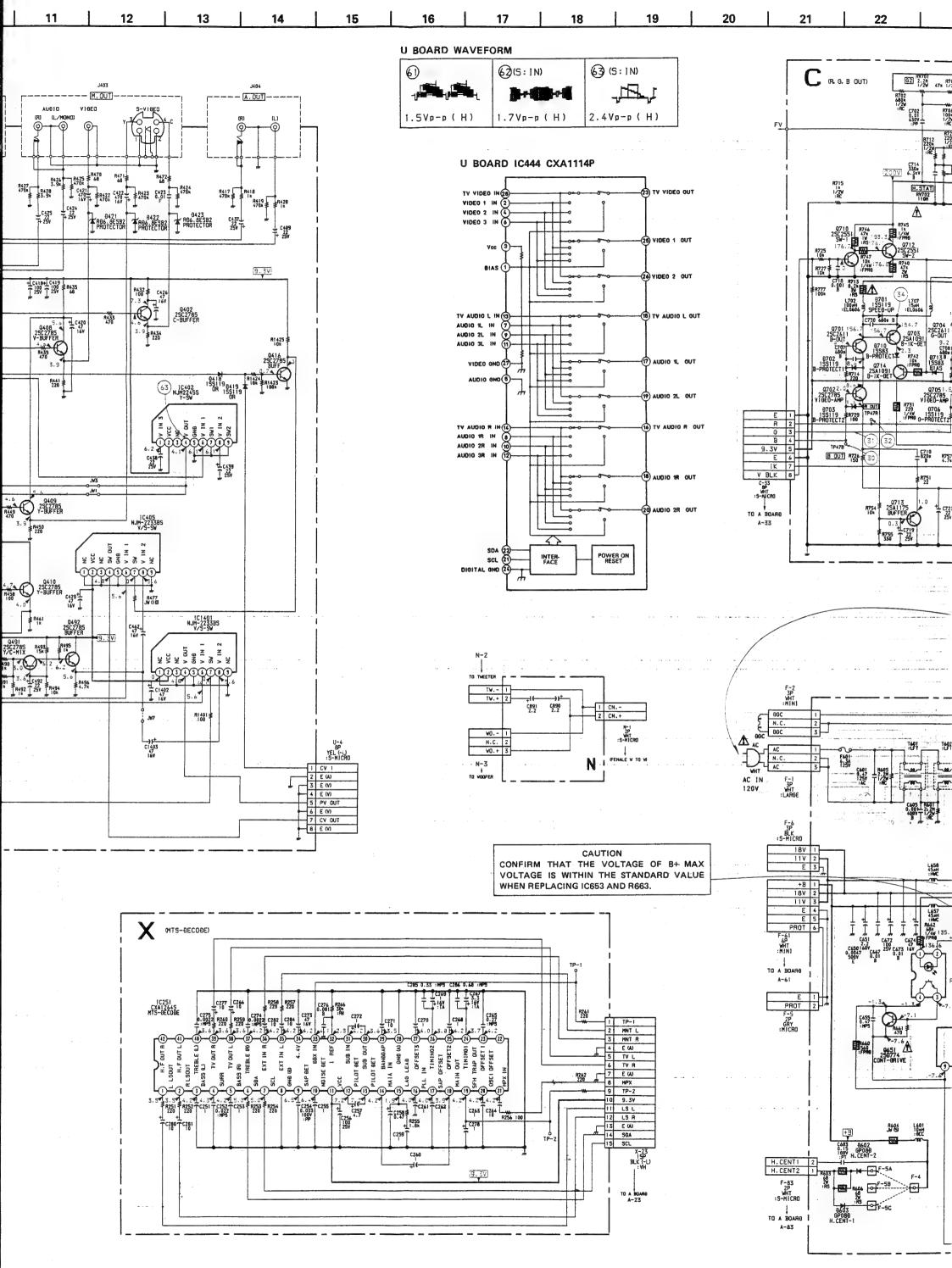


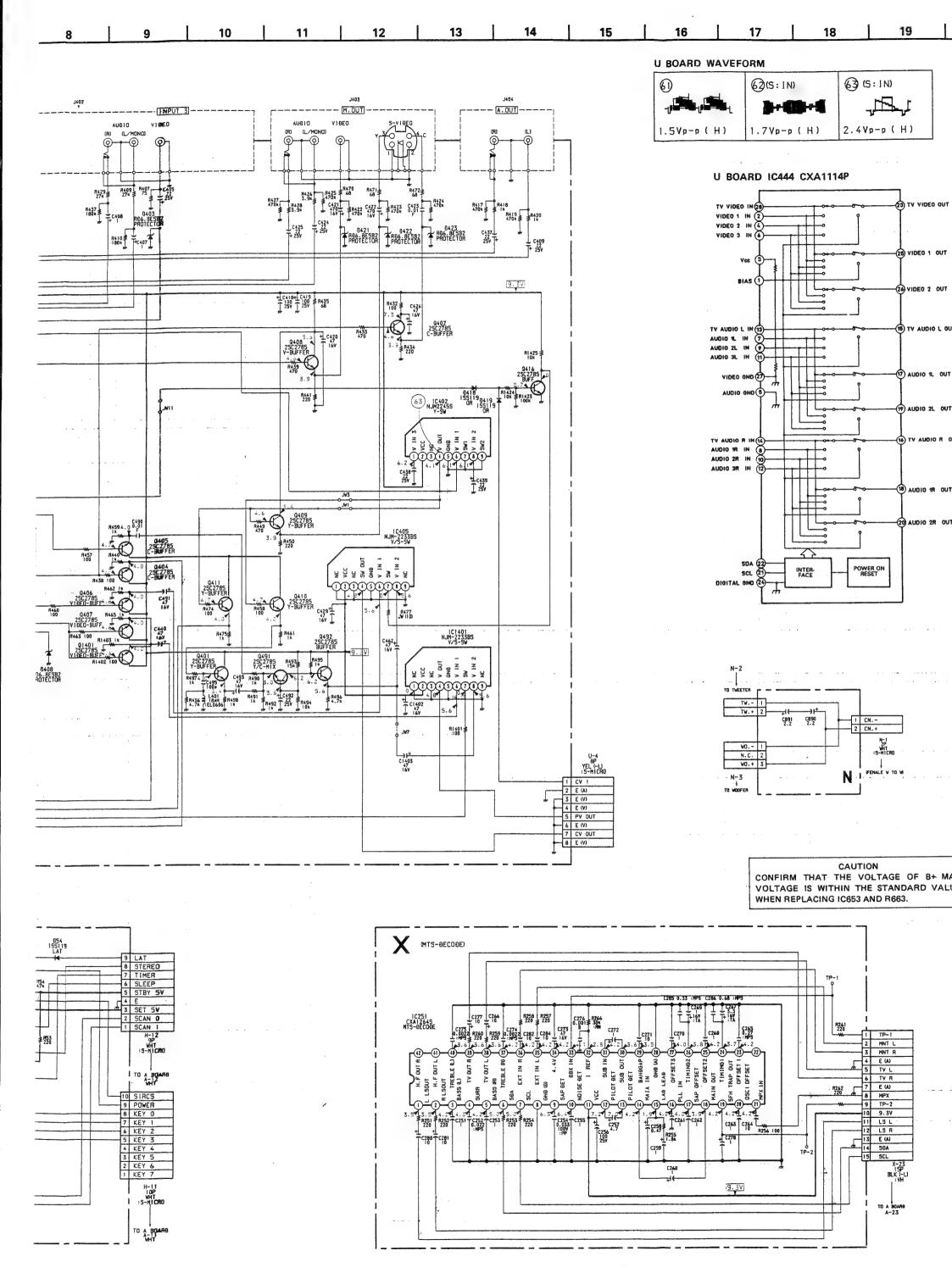


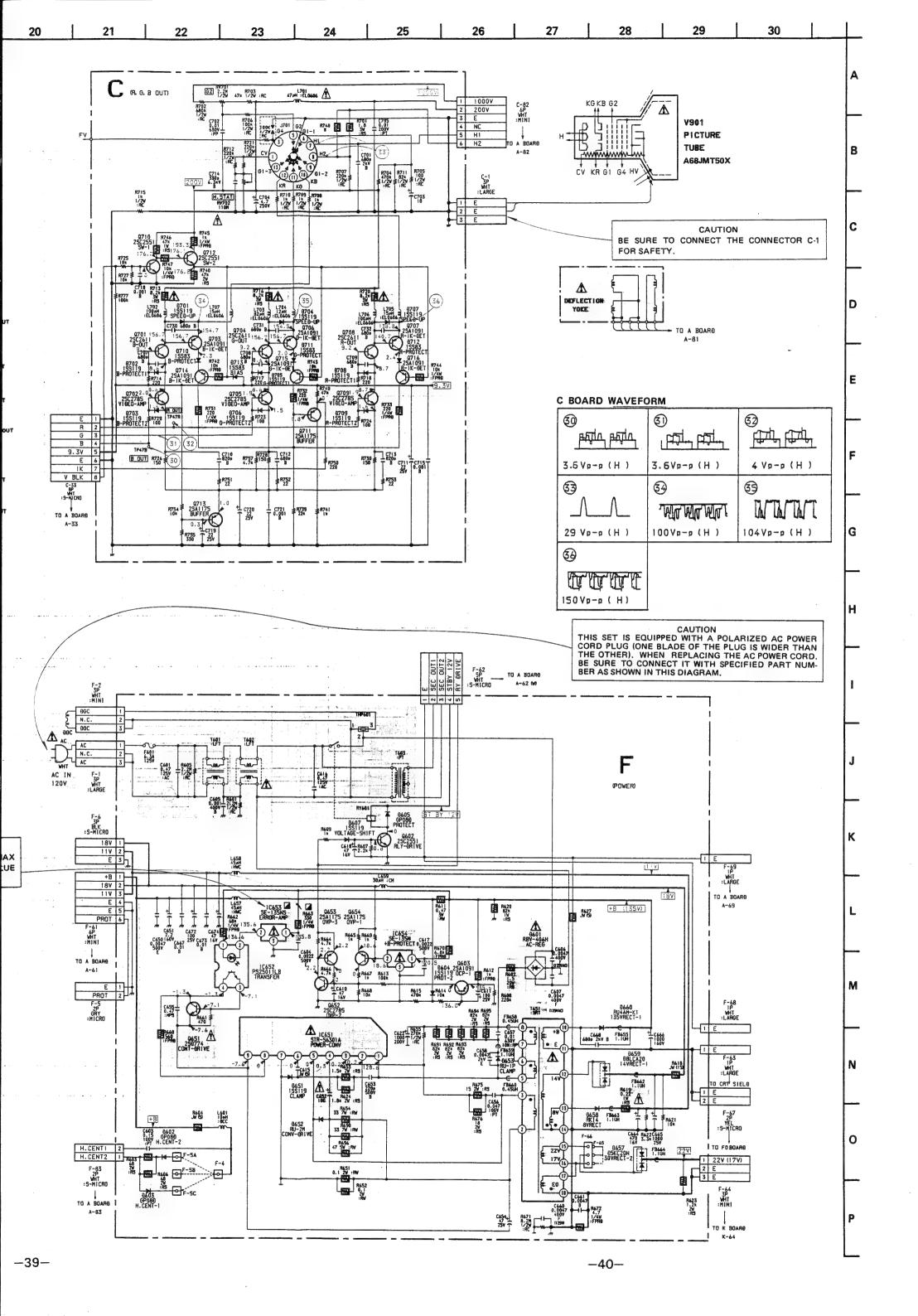




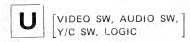






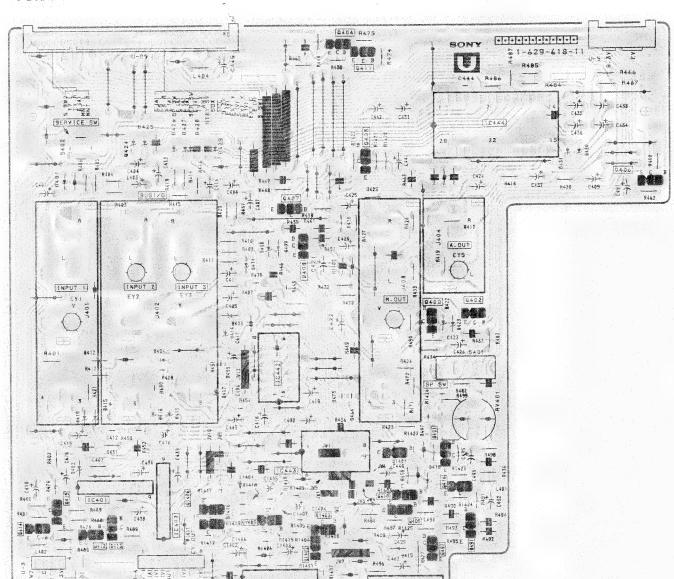


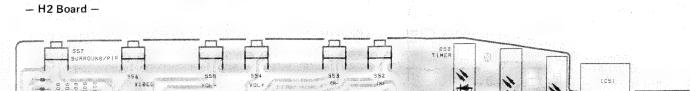






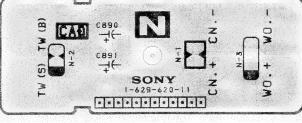
- U Board -





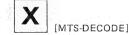
SONY 1-629-622-11



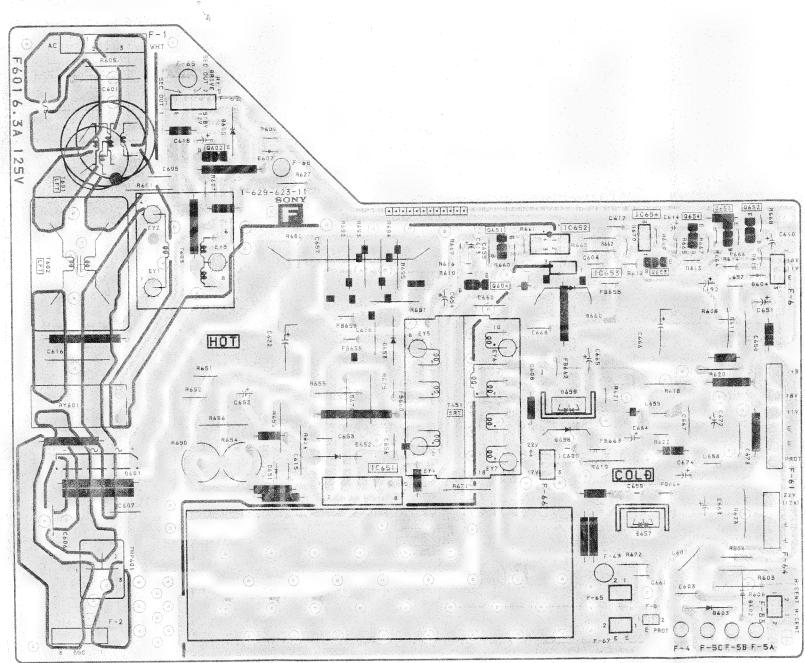






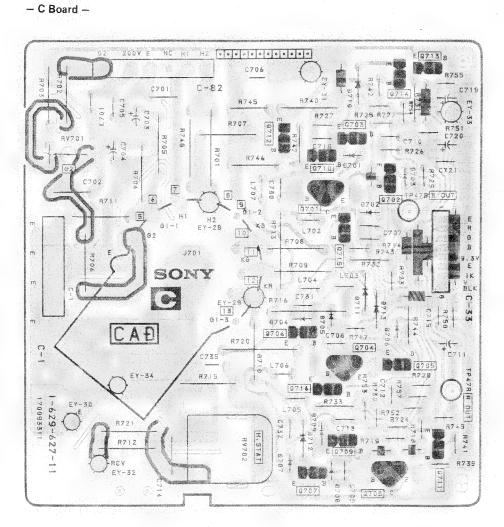


- F Board -

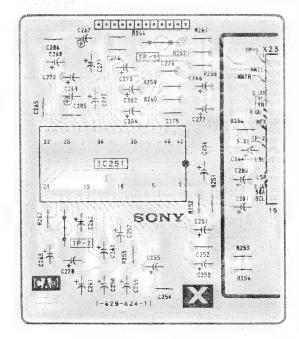




The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

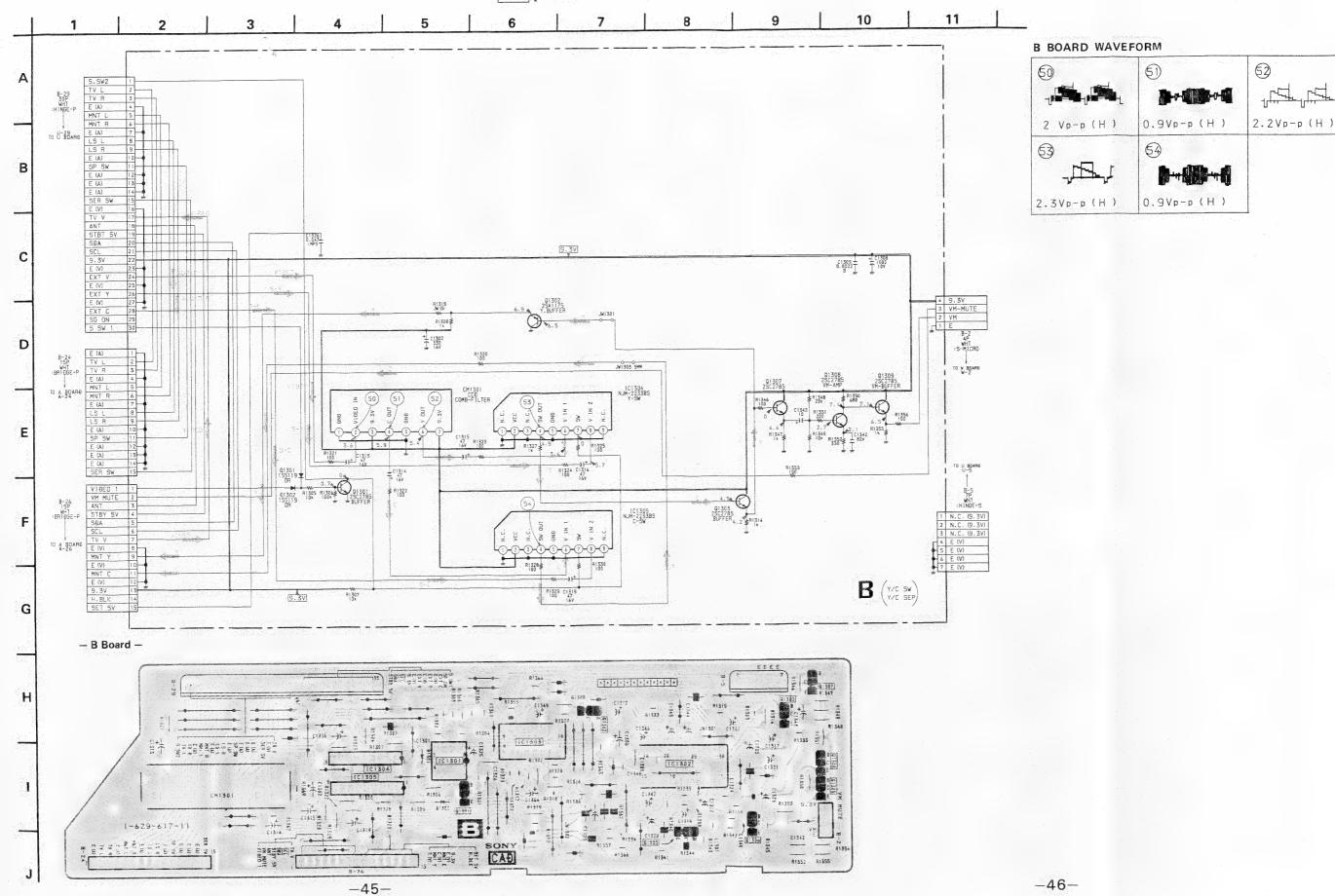


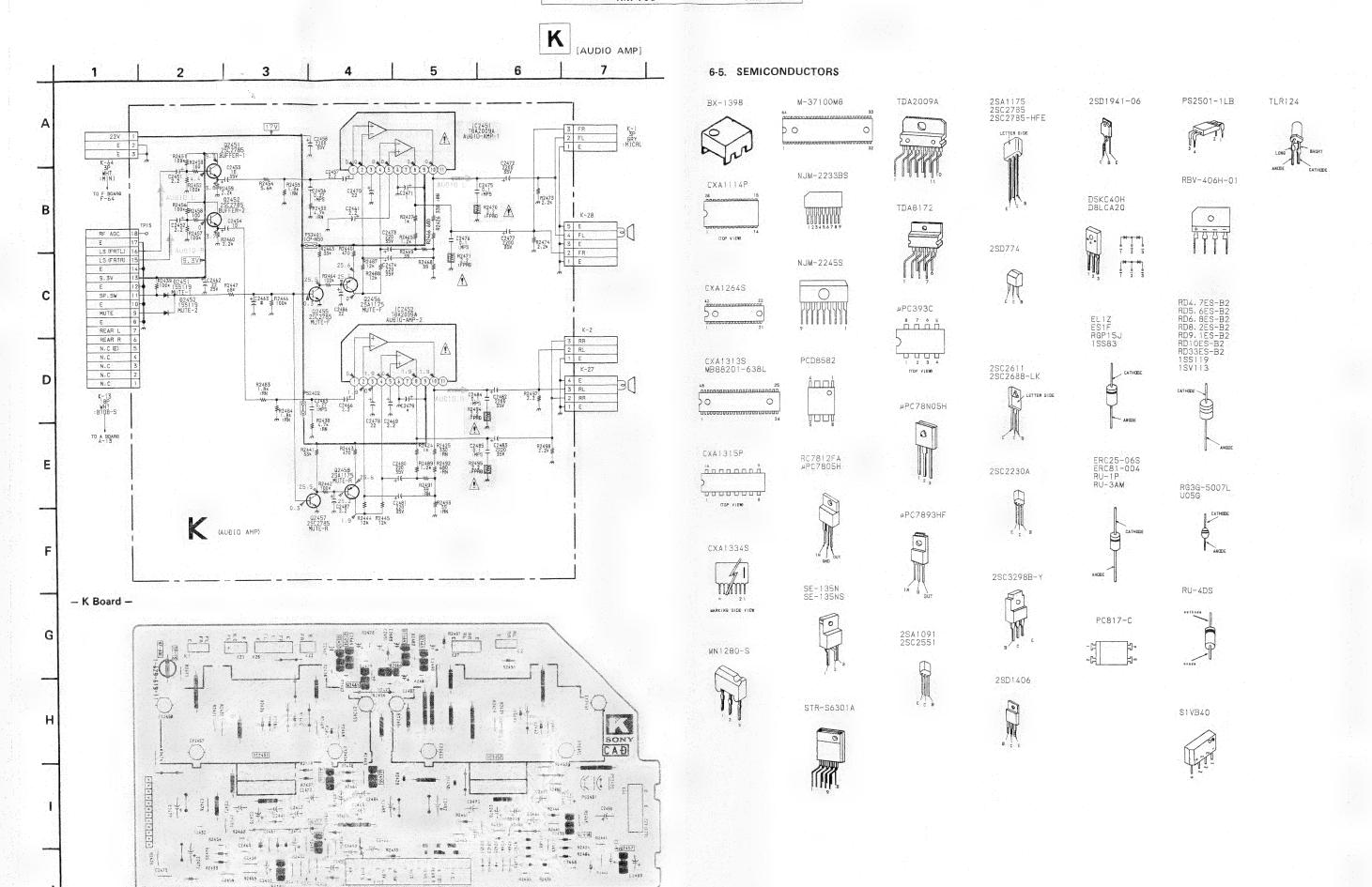
### - X Board -



(52)







-47-

### SECTION 7 **EXPLODED VIEWS**

#### NOTE:

- NOTE:
   Items with no part number and no description are not stocked because they are seldom required for routine service.
   The construction parts of an assembled part are indicated with a collation number in the remark column.

Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark A are critical for safety. Replace only with part number

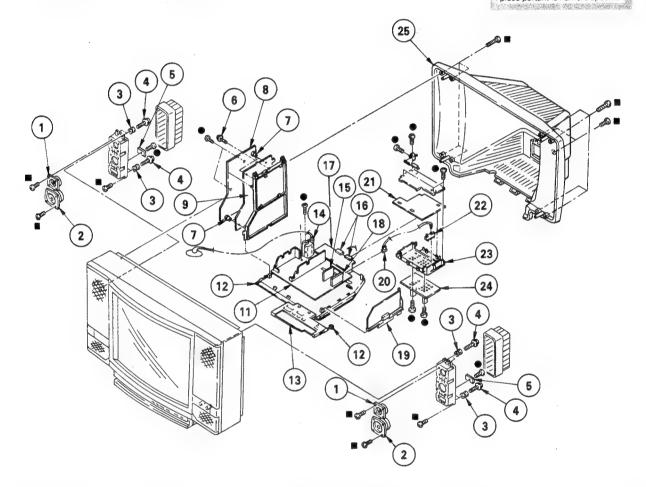
specified.

specified.

Les composants identifies par une trame et une marque  $\, ilde{ \Delta } \,$ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

### 7-1. CHASSIS

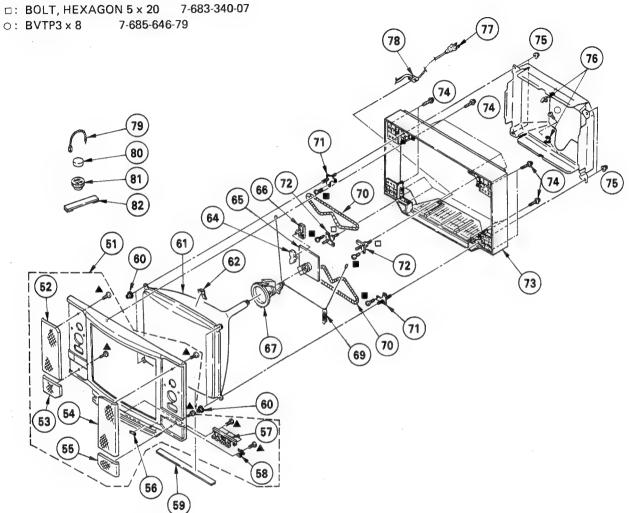
●: BVTP3 x 12 7-685-648-79 ■: BVTP4 x 16 7-685-663-79



REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO. PART NO.	DESCRIPTION	RE MARK
1 1-544-095-11 2 1-503-917-11 3 4-374-745-11 4 4-384-096-01 5 *1-629-620-11 6 4-388-477-01 7 3-531-576-31 8 *A-1245-453-A 9 *1-629-628-11 11 *A-1296-567-A 12 4-319-520-11 13 *1-629-622-11	SPEAKER CUSHION (A) SCREW (4X16), TAPPING, +P N BOARD SCREW (3X16), TAPPING RIVET (DIA. 3), NYLON F BOARD, COMPLETE FO BOARD A BOARD, COMPLETE SCREW, SPECIAL (+PW4X30)	15	15 *1-629-624-11 16 *1-568-507-11 17 *A-1135-560-A	X BOARD CONNECTOR, BRIDGE 15P B BOARD, COMPLETE TUNER, ET (BTP-201A) K BOARD, COMPLETE CABLE, P-P U BOARD, COMPLETE SELECTOR, ANTENNA (AS-1)	(NX-2300)

### 7-2. PICTURE TUBE

■: BVTP4 x 16 7-685-663-79 7-685-650-79 ▲: BVTP3 x 16



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO. PART NO.	DESCRIPTION	REMARK
62 64 65 66	X-4388-473-1 X-4388-467-1 X-4388-468-1 X-4388-466-1 4-393-617-01 4-393-617-01 4-370-595-01 4-376-980-01 	BEZEL ASSY GRILLE (LEFT UPPER) ASSY GRILLE (LEFT LOWER) ASSY GRILLE (RIGHT UPPER) ASSY GRILLE (RIGHT UPPER) ASSY WINDOW, ORNAMENTAL BUTTON, MULTI BUTTON, MULTI BUTTON, POWER SHEET, BLOTTING NUT, SPECIAL, PICTURE TUBE PICTURE TUBE (A68JMT50X) SPACER, DY COVER (MAIN), CV C BOARD, COMPLETE COVER (REAR LID), CV DEFLECTION YOKE (Y28PFA)	52-58	69 4-369-318-00 70 \( \Lambda \) 1-426-350-21 71 *4-379-197-01 72 *4-376-989-01 73 4-393-622-01 4-393-622-01 74 4-319-520-11 75 4-306-034-00 76 *4-371-629-01 77 \( \Lambda \) 1-559-396-11 78 \( \Lambda \) 4-388-328-01 79 4-308-870-00 80 1-452-032-00 81 1-452-034-00 82 X-4306-312-0	SPRING, TENSION COIL, DEMAGNETIZATION BRACKET (H), PICTURE TUBE BRACKET (E), PICTURE TUBE CABINET (BLACK) CABINET (GRAY) (USA ONLY) SCREW, SPECIAL (+PW4X3O) FLANGE NUT, (B) 5MM STOPPER, WIRE CORD, POWER GROMMET, AC CORD CLIP, LEAD WIRE MAGNET, DISK; 10MM  PERMALLOY ASSY, CONVERGENCE	

The components identified by shading and mark A are critical for safety.

Replace only with part number

specified.

Les composants identifies par une trame et une marque 🐧 sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

# SECTION 8 ELECTRICAL PARTS LIST

В

NOTE:

specified.

The components identified by shading and mark A are critical for safety.

Replace only with part number

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- · All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS COILS \* MF :  $\mu$ F, PF :  $\mu$ F \* MMH :  $\Pi$ H, UH :  $\mu$ H

 The components identified by in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF.NO. PART NO.	DESCRIPTION			REMARK	REF.NO.	PART NO.	DESCRIPTION				REMARK
*A-1135-560-A *1-564-507-11 1-566-942-11 *1-568-371-11	PLUG, CONNECTOR, HIL PIN, CONNECTOR	TOR 4P NGE(RECEPTAC DR (PC BOARD	) 15P		R1320 R1321 R1322 R1323 R1324	1-249-405-11 1-249-405-11 1-249-405-11 1-249-405-11 1-249-405-11	CARBON CARBON CARBON CARBON CARBON	100 100 100 100 100	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
*1-368-376-11 <cap< td=""><td>ACITOR&gt;</td><td>NGE (RECEPTA</td><td>(CLE) 17</td><td></td><td>R1325 R1327 R1328 R1329</td><td>1-249-405-11 1-249-417-11 1-249-405-11 1-249-405-11</td><td>CARBON CARBON CARBON CARBON</td><td>100 1K 100 100</td><td>5% 5% 5% 5%</td><td>1/4W 1/4W 1/4W 1/4W</td><td></td></cap<>	ACITOR>	NGE (RECEPTA	(CLE) 17		R1325 R1327 R1328 R1329	1-249-405-11 1-249-417-11 1-249-405-11 1-249-405-11	CARBON CARBON CARBON CARBON	100 1K 100 100	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
C1302 1-124-119-00 C1308 1-124-473-11 C1309 1-102-121-00 C1313 1-124-477-11 C1314 1-124-477-11	ELECT ELECT CERAMIC ELECT ELECT	330MF 1000MF 0.0022MF 47MF 47MF	20% 20% 10% 20% 20%	16V 10V 50V 16V 16V	R1330 R1346 R1347	1-249-405-11 1-249-405-11 1-249-417-11 1-249-433-11 1-249-429-11	CARBON CARBON CARBON CARBON		5% 5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
C1315 1-124-477-11 C1316 1-124-477-11 C1319 1-124-477-11 C1326 1-136-161-00	ELECT ELECT ELECT FILM	47MF 47MF 47MF 0.047MF 82PF	20% 20% 5% 5%	16V 16V 16V 50V 50V	R1350	1-249-415-11 1-249-409-11 1-249-411-11 1-249-405-11	CARBON CARBON CARBON		55%	1/4W 1/4W 1/4W 1/4W	
C1342 1-102-971-00 C1343 1-123-875-11				50V	R1355	1-249-405-11 1-249-405-11	CARBON	1K 100	5% 5%	1/4W 1/4W	
<fil< td=""><td>TER BLOCK&gt;</td><td></td><td></td><td></td><td>R1367 R1369</td><td>1-249-418-11 1-249-418-11</td><td>CARBON CARBON</td><td>1.2K 1.2K</td><td>5% 5%</td><td>1/4W 1/4W</td><td></td></fil<>	TER BLOCK>				R1367 R1369	1-249-418-11 1-249-418-11	CARBON CARBON	1.2K 1.2K	5% 5%	1/4W 1/4W	
CM1301 1-464-880-11	FILTER BLOCK	, COM (CFB-2	2)		*****	*******	*********	*****	****	*****	*******
<dio< td=""><td>DE&gt;</td><td></td><td></td><td></td><td></td><td>*A-1245-453-A</td><td>F BOARD, COMP</td><td></td><td></td><td></td><td></td></dio<>	DE>					*A-1245-453-A	F BOARD, COMP				
D1301 8-719-911-19 D1302 8-719-911-19 <ic></ic>	DIODE 188119				1	*1-506-348-99 *1-508-765-00 *1-508-768-00 *1-508-784-00 1-533-127-00	PIN. CUNNECTE	JK (5MM	PITCH	) br	
IC1304 8-759-710-69 IC1305 8-759-710-69						*1-533-189-11 *1-559-991-21 *1-560-290-00 *1-564-505-11 *1-564-506-11	HOLDER, FUSE CONNECTOR ASS PLUG, CONNECT	SY 1P FOR (2.5			
Q1301 8-729-119-78 Q1302 8-729-119-76 Q1303 8-729-119-78 Q1307 8-729-119-78 Q1308 8-729-119-78	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SA1175-HFE SC2785-HFE SC2785-HFE				*1-564-508-11 *1-565-514-11 *1-568-378-21 *4-341-752-01	PLUG, CONNECT SOCKET, CONNI PIN, CONNECTO	OR 5P Ector 2P Dr 3P		Y5,EY6	, EY7 )
Q1309 8-729-119-78	TRANSISTOR 2	SC2785-HFE				<cap< td=""><td>ACITOR&gt;</td><td></td><td></td><td></td><td></td></cap<>	ACITOR>				
R1305 1-249-429-11 R1306 1-249-441-11	SISTOR> CARBON CARBON	10K 5% 100K 5%	1/4W 1/4W		C601 A C603 C604 C605 A C606 A	1-136-311-51 1-108-391-12 1-101-821-00 .1-162-576-51 .1-161-953-51	FILM MYLAR CERAMIC CERAMIC CERAMIC	0.47MF 0.15MF 0.0022M 0.001MF 0.0047M	if	20% 10% 10% 20%	125 V 100 V 500 V 400 V
R1307 1-249-429-11 R1308 1-249-417-11 R1314 1-249-417-11	CARBON CARBON CARBON	10K 5% 100K 5% 10K 5% 1K 5% 1K 5%	1/4W 1/4W 1/4W		i	1-162-599-12 1-124-477-11				20% 20%	40) V 16"



The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number

specified.

REF.NO. PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTION			REMARK 
C611 1-123-333-00 C616	ELECT 100MF FILM 0.47MF CERAMIC 0.0022MF ELECT 47MF ELECT(BLOCK) 1000MF	20% 20% 20%	25V 125V 500V 16V 200V	L657	<01 1-459-104-00 1-459-155-00	COIL, DUST COIL (WITH CO	DRE) 45UH		
C650 1-161-830-00 C651 1-124-799-11 C652 △ 1-124-122-91 C653 1-102-244-00 C654 1-124-126-00	CERAMIC         0.0047MF           ELECT         2.2MF           ELECT         100MF           CERAMIC         220PF           ELECT         47MF	20% 20% 10% 20%	500V 160V 50V 500V 25V	1.658	1-459-155-00 1-459-407-00	COIL (WITH CO	ORE) 45UH		
C655 1-136-173-00 C656 1-106-383-00 C657 1-136-601-11 C658 1-162-114-00 C660 1-162-599-12	FILM 0.47MF MYLAR 0.047MF FILM 0.01MF CERAMIC 0.0047MF CERAMIC 0.0047MF	5% 10% 10% 20%	50V 100V 630V 2KV 400V	Q602 Q603 Q651 <u>↑</u> Q652 Q653	8-729-255-12 8-729-200-17 8-729-177-43 8-729-119-78 8-729-119-76	TRANSISTOR 29 TRANSISTOR 29 TRANSISTOR 29	SA1091 SD774 SC2785-HFE		
C661 1-102-125-00 C663 1-124-618-11	CERAMIC 0.0047MF ELECT 2200MF	10% 20%	50V 35V	Q654	8-729-119-76	TRANSISTOR 25	SA1175-HFE		
C664 1-126-103-11 C665 1-124-557-11 C666 1-125-564-11	ELECT 470MF ELECT 1000MF ELECT(BLOCK) 1000MF	20% 20% 20%	16V 25V 160V		<res< td=""><td>ISTOR&gt;</td><td></td><td></td><td></td></res<>	ISTOR>			
C667 1-102-129-00 C668 1-162-116-00 C672 1-123-333-00 C673 1-102-129-00	CERAMIC 0.01MF CERAMIC 680PF	10% 10% 20% 10% 20%	50V 2KV 25V 50V 16V	R602 A R603 R605 A	. 1-202-723-51 . 1-205-798-11 1-215-885-00 . 1-202-723-51 1-215-885-00	WIREWOUND METAL OXIDE SOLID	2.2M 10% 1.5 5% 68 5% 2.2M 10% 68 5%	1/2W 20W 2W 1/2W 2W	F F
<dio< td=""><td>DE&gt;</td><td></td><td>101</td><td>R607 R608 R609 R611</td><td>1-249-421-11 1-247-887-00 1-249-417-11 1-207-645-00</td><td>CARBON CARBON</td><td>2.2K 5% 220K 5% 1K 5% 0.47 10%</td><td>1/4W 1/4W 1/4W 3W</td><td>F.</td></dio<>	DE>		101	R607 R608 R609 R611	1-249-421-11 1-247-887-00 1-249-417-11 1-207-645-00	CARBON CARBON	2.2K 5% 220K 5% 1K 5% 0.47 10%	1/4W 1/4W 1/4W 3W	F.
D601 ★ .8-719-305-07 D602 8-719-911-55 D603 8-719-911-55 D604 8-719-911-19 D605 8-719-911-55	DIODE RBV-406H DIODE UO5G DIODE UO5G DIODE 1SS119 DIODE UO5G			R612 R613 R614 R615	1-249-417-11 1-249-441-11 1-249-429-11 1-247-895-00	CARBON CARBON CARBON	1K 5% 100K 5% 10K 5% 470K 5%	1/4W 1/4W 1/4W	F
D607 8-719-911-19 D651 8-719-911-19 D652 8-719-300-33 D653 8-719-311-31 D657 8-719-500-67	DIODE 1SS119 DIODE 1SS119 DIODE RU-3AM DIODE RU-1P DIODE D5KC4OH			R620 R620 R621 R622 R623 R624	1-216-341-51 1-216-444-11 1-249-429-11 1-249-423-11 1-216-457-00 1-216-458-11	METAL OXIDE  CARBON CARBON METAL OXIDE	0.22 5% 82K 5% 10K 5% 3.3K 5% 1.2K 5% 1.8K 5%	1W 1W 1/4W 1/4W 2W 2W	F F
D658 8-719-981-00 D659 8-719-500-41 D660 8-719-312-10	DIODE ERC81-004 DIODE D8LCA20 DIODE RU4AM-T3			R651 R652 R653	1-207-612-00 1-207-612-00 1-215-893-11	WIREWOUND WIREWOUND	0.1 10% 0.1 10% 1.5K 5%	2W 2W 2W	F F
<fus< td=""><td>SE&gt;</td><td></td><td></td><td>R654 R655</td><td>1-205-945-11 1-202-843-11</td><td>WIREWOUND SOLID</td><td>33 10% 270K 10%</td><td>7₩ 1/2₩</td><td>F</td></fus<>	SE>			R654 R655	1-205-945-11 1-202-843-11	WIREWOUND SOLID	33 10% 270K 10%	7₩ 1/2₩	F
F601 🛦 . 1-532-748-11	FUSE, GLASS TUBE 6.3	V/125V	Na constant	1	1-249-414-51 1-249-413-11		560 5% 470 5%	1/4W	F
<fef< td=""><td>RRITE BEAD INDUCTOR&gt;</td><td></td><td></td><td>R662 R663</td><td>1-249-467-11 1-247-706-11</td><td>CARBON CARBON</td><td>68K 5%</td><td>1/4W 1/4W</td><td>F F</td></fef<>	RRITE BEAD INDUCTOR>			R662 R663	1-249-467-11 1-247-706-11	CARBON CARBON	68K 5%	1/4W 1/4W	F F
FB655 1-410-397-21 FB658 1-410-396-41	FERRITE BEAD INDUCTOR FERRITE BEAD INDUCTOR			R664 R665	1-249-425-11 1-249-417-11	CARBON CARBON	330 5% 4.7K 5% 1K 5%	1/4W 1/4W	
FB659 1-410-397-21 FB660 1-410-396-41 FB662 1-410-397-21	FERRITE BEAD INDUCTOR FERRITE BEAD INDUCTOR FERRITE BEAD INDUCTOR			R666 R667 R668 R669	1-249-425-11 1-249-417-11 1-249-429-11 1-249-417-11	CARBON CARBON CARBON CARBON	4.7K 5% 1K 5% 10K 5% 1K 5% 6.8K 5%	1/4W 1/4W 1/4W 1/4W	
FB663 1-410-397-21 FB664 1-410-397-21	FERRITE BEAD INDUCTOR FERRITE BEAD INDUCTOR			R670	1-249-427-11	CARBON		1/4W	F
<10	>			R671 R672 R675	1-202-730-00 1-249-455-11 1-215-881-11	SOLID CARBON METAL OXIDE	8.2M 10% 4.7 5% 15 5%	1/2W 1/4W 2W	F F
IC651A.8-749-920-81	IC STR-S6301A HOLDER, IC; IC651		٠.	R676 R690	1-216-446-00 1-205-945-11	METAL OXIDE	18 5% 33 10%	2₩ 7₩	F F
10652 8-719-156-73 106534 8-749-920-62	SHEET (R), RADIATION; DIODE PS2501-1LB	IC651		R691 R692 R693	1-216-468-11 1-216-468-11 1-216-468-11	METAL OXIDE METAL OXIDE	82K 5% 82K 5% 82K 5% 82K 5% 82K 5%	2₩ 2₩ 2₩	4 4 4
1 C654A, 8-749-920-61	IC SE-135N			R694 R695	1-216-468-11 1-216-468-11	METAL OXIDE	82K 5% 82K 5%	2₩ 2₩	F

The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number

specified.

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF.NO. PART NO.	DESCRIPTION			REMARK	REF.NO.	PART NO.	DESCRIPTION			REMARK
R696 · 1-207-682-00		47 10%	∑ 5₩	F	C199 C201 C202	1-124-477-11 1-124-478-11 1-102-121-00		47MF 100MF 0.0022MF	20% 20% 10%	16 <b>V</b> 25 <b>V</b> 50 <b>V</b>
<rel RY601A 1-515-601-11</rel 					C203 C301	1-102-121-00 1-124-120-11	CERAMIC ELECT	0.0022MF 220MF	10% 20%	50 <b>V</b> 16 <b>V</b>
#100 GiC 1 501 ft	RELAI				C302 C303	1-124-234-00 1-136-153-00	ELECT	22MF 0.01MF	20% 5%	16V 50V
	NSFORMER>				C304	1-124-499-11	ELECT	1MF	20%	50 <b>V</b>
T601 A. 1-424-220-21 T602 A. 1-424-205-11 T603 A. 1-448-916-11 T651 A. 1-449-607-11	TRANSFORMER, TRANSFORMER, TRANSFORMER, TRANSFORMER	LINE FILTE LINE FILTE POWER	R R		C305 C306 C307 C308 C309	1-124-465-00 1-124-234-00 1-102-978-00 1-102-965-00 1-136-165-00	ELECT ELECT CERAMIC CERAMIC FILM	0.47MF 22MF 220PF 39PF 0.1MF	20% 20% 5% 5% 5%	50V 16V 50V 50V 50V
	RMISTOR>				C310 C311	1-136-165-00 1-136-165-00	FILM FILM	0.1MF 0.1MF	5% 5%	50 <b>V</b> 50 <b>V</b>
THP601A 1-808-081-22	THERMISTOR,	POSITIVE			C312 C313	1-136-169-00 1-124-499-11	FILM ELECT	0.22MF 1MF	5% 20%	50V 50V
***********			******	*******	C315	1-136-158-00	FILM	0.027MF	5%	50♥
*A-1296-567-A	A BOARD, COM				C316 C317	1-102-973-00 1-136-169-00	CERAMIC FILM	100PF 0.22MF	5% 5% 5% 20%	50V 50V
*1-508-768-00 *1-560-124-00	PIN, CONNECT	OR (5MM PIT	CH) 6P		C318 C319 C320	1-136-169-00 1-102-980-00 1-124-499-11	FILM CERAMIC ELECT	0.22MF 270PF 1MF	5% 5%	50V 50V 50V
*1-564-038-00 *1-564-505-11	CONNECTOR PL	UG, DY (MIN	1) 6P		C321	1-124-499-11		0.01MF	5%	50V
*1-564-507-11					C322	1-124-499-11 1-124-443-00	ELECT ELECT	1MF 100MF	20% 20%	50V 10V
*1-564-508-11 *1-564-509-11	PLUG. CONNEC	TOR 6P			C324	1-102-114-00	CERAMIC CERAMIC	470PF 470PF	10% 10%	50V 50V
*1-564-511-11 *1-564-512-11	PLUG, CONNEC	TOR 9P				1-124-499-11	ELECT	1MF	20% 5%	50 <b>V</b>
*1-564-513-11			DD 10D		C327 C328	1-130-479-00 1-123-875-11	MYLAR ELECT	0.0047MF 10MF	20%	50V 50V
*1~565~509~11 *1~568~371~11 *4~341~751~01	PIN, CONNECT	OR (PC BOAR	D) 15P		C331	1-124-799-11 1-102-112-00	ELECT CERAMIC	2.2MF 330PF	20% 10%	160V 50V
*4-341-752-01	EYELET (EY1,	EY2, EY3, EY4	, EY5)		C332 C333	1-136-157-00 1-124-499-11	FILM ELECT	0.022MF 1MF	5% 20%	50 <b>V</b> 50 <b>V</b>
<con< td=""><td>NECTOR&gt;</td><td></td><td></td><td></td><td>C334 C335</td><td>1-136-161-00 1-130-471-00</td><td>FILM MYLAR</td><td>0.047MF 0.001MF</td><td>5% 5%</td><td>50<b>V</b> 50<b>V</b></td></con<>	NECTOR>				C334 C335	1-136-161-00 1-130-471-00	FILM MYLAR	0.047MF 0.001MF	5% 5%	50 <b>V</b> 50 <b>V</b>
A33 *1-564-511-11	PLUG, CONNEC	TOR 8P			1	1-126-233-11	ELECT	22MF	20%	50 <b>V</b>
·CIT	A CI TOD				C339 C340	1-123-875-11 1-124-902-00	ELECT ELECT	10MF 0.47MF	20% 20%	50 <b>V</b> 50 <b>V</b>
C101 1-123-875-11	ACITOR>	10MF	20%	50V	C342 C343 C344	1-161-377-00 1-119-363-00 1-126-176-11	CERAMIC ELECT ELECT	0.0047MF 4.7MF 220MF	30% 20%	50V 25V 10V
C102 1-126-233-11 C103 1-124-360-00	ELECT	22MF 1000MF	20% 20%	25V 16V	C351	1-136-169-00		0.22MF		50 <b>V</b>
C104 1-124-473-11 C106 1-136-153-00	ELECT FILM	1000MF 0.01MF	20% 5%	10V 50V	C352 C353	1-136-165-00 1-124-902-00	FILM ELECT	0.1MF 0.47MF	5% 5% 20%	50 <b>Y</b> 50 <b>Y</b>
C107 -1-119-160-00	ELECT	470MF		10V	C382 C500	1-124-234-00 1-130-475-00	ELECT MYLAR	22MF 0.0022MF	20% 5%	16 <b>V</b> 50 <b>V</b>
C108 1-123-875-11 C109 1-102-973-00	ELECT CERAMIC	10MF 100PF	20% 5% 5%	50V 50V	C501	1-124-122-11	ELECT	100MF_	20%	50 <b>V</b>
C111 1-102-978-00 C112 1-136-161-00	CERAMIC FILM	220PF 0.047MF	5% 5%	50V 50V	C503	1-124-557-91 1-124-477-11	ELECT ELECT	1000MF 47MF	20% 20%	25V 25V
C113 1-124-499-11 C114 1-102-978-00	ELECT CERAMIC	1MF 220PF	20% 5%	50V 50V	C504 C505	1-106-216-00 1-106-383-00	MYLAR MYLAR	0.068MF 0.047MF	10% 10%	10 <b>0 V</b> 10 <b>0 V</b>
C114 1-102-978-00 C115 1-101-006-00 C116 1-102-973-00	CERAMIC CERAMIC	0.047MF 100PF		50V 50V	C508 C509	1-136-161-00 1-106-387-00	FILM MYLAR	0.047MF 0.068MF	5% 10%	50 <b>V</b> 20 <b>0</b> V
C119 1-123-875-11	ELECT	10MF	5% 20%	50V	C510 C511	1-102-228-00 1-124-494-00	CERAMIC ELECT	470PF 33MF	10%	500 V 160 V
C120 1-124-360-00 C121 1-136-165-00	ELECT FILM	1000MF 0.1MF	20% 5%	16V 50V	C512	1-124-046-00	ELECT	10MF	20%	16 <b>0</b> V
C 124 1-130-728-00 C 125 1-102-121-00	FILM CERAMIC	0.0022MF 0.0022MF	5% 5% 10%	50V 50V	C513 C514	1-124-477-11 1-124-557-11	ELECT ELECT	47MF 1000MF	20% 20%	25 <b>V</b> 25 <b>V</b>
C126 1-102-121-00	CERAMIC	0.0022MF	10%	50V	C515 C516	1-162-114-00 1-162-116-00	CERAMIC CERAMIC	0.0047MF 680PF	10%	2KV 2KV
C 128 1-124-477-11 C 129 1-136-161-00		47MF 0.047MF	20% 5%	16V 50V	C517	1-162-116-00	CERAMIC	680PF	10%	2K <b>V</b>



The components identified by shading and mark  $\triangle$  are critical for safety.
Replace only with part number specified.

REF.NO. PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C520 1-162-116-00	FILM 0.021MF CERAMIC 680PF CERAMIC 100PF	3% 10% 10%	200V 2KV 2KV 2KV 2KV	CP109 CP110	1-236-358-21 1-236-294-21 <diode< td=""><td>NETWORK, RES</td><td></td></diode<>	NETWORK, RES	
C523 1-102-244-00 C524 1-106-383-00 C525 1-124-902-00 C526 1-102-244-00 C527 1-162-318-11	CERAMIC 220PF MYLAR 0.047MF ELECT 0.47MF CERAMIC 220PF CERAMIC 0.001MF	10% 10% 20% 10% 10%	500V 200V 50V 500V 500V	D101 D102 D103 D104 D105	8-719-110-78 8-719-911-19 8-719-911-19 8-719-911-19	DIODE RD33ES-B2 DIODE 1SS119 DIODE 1SS119	
C528 1-102-030-00 C529 1-136-109-00 C530 1-123-947-00 C531 1-130-475-00 C532 1-130-475-00	CERAMIC 330PF FILM 0.68MF ELECT 10MF MYLAR 0.0022M MYLAR 0.0022M	5%	500V 200V 250V 50V 50V	D106 D112 D114 D301 D302	8-719-911-19 8-719-911-19 8-719-911-19 8-719-110-48 8-719-109-89	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE RD18ES-B1 DIODE RD5.6ES-B2	
C537 1-124-927-11	MYLAR 0.001MF ELECT 47MF ELECT 22MF FILM 0.0047M ELECT 4.7MF	5% 20% 20% 10% 20%	50V 25V 250V 630V 50V	D303 D304 D306 D307 D308	8-719-109-84 8-719-109-96 8-719-911-19 8-719-911-19 8-719-911-19	DIODE RD5.1ES-B1 DIODE RD6.8ES-B1 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119	
C541 1-106-383-00 C543 1-136-828-11 C544 1-106-343-00 C545 1-124-910-11 C546 1-102-228-00	MYLAR 0.047MF FILM 1.8MF MYLAR 0.001MF ELECT 47MF CERAMIC 470PF	5% 10% 20% 10%	200V 200V 100V 50V 500V	D350 D500 D501 D502 D503	8-719-109-89 8-719-911-55 8-719-300-33 8-719-902-85 8-719-901-58	DIODE RD5.6ES-B2 DIODE UO5G DIODE RU-3AM DIODE RG3G-5007L DIODE RGP15J	
	ELECT 4.7MF ELECT 47MF FILM 1MF ELECT 4.7MF CERAMIC 470PF	20% 20% 5% 20% 10%	50V 25V 200V 50V 500V	D504 D505 D506 D507 D508	8-719-500-26 8-719-300-65 8-719-911-19 8-719-300-33 8-719-911-19	DIODE D5KD2OH DIODE ES1F DIODE 1SS119 DIODE RU-3AM DIODE 1SS119	
C553 1-123-875-11 C555 1-123-875-11 C556 1-123-932-00 C557 1-102-114-00 C558 1-136-161-00	ELECT 10MF ELECT 10MF ELECT 4.7MF CERAMIC 470PF FILM 0.047MF	20% 20% 20% 10% 5%	50V 50V 160V 50V 50V	D509 D511 D512	8-719-911-19 8-719-902-85 8-719-311-87 *4-393-401-01 8-719-911-19	DIODE 1SS119 DIODE RG3G-5007L DIODE FMS-3FU SPRING; D512 DIODE 1SS119	
C583 1-124-478-11 C584 1-124-478-11	FILM 0.1MF ELECT 100MF ELECT 100MF ELECT 100MF ELECT 100MF	5% 20% 20% 20% 20%	50V 25V 25V 25V 25V	D514 D515 D531 D533 D536	8-719-911-19 8-719-911-19 8-719-911-19 8-719-109-81 8-719-300-33	DIODE 1SS119	
C586 1-124-478-11 C611 \( \Lambda \) . 1-102-125-91 C612 \( \Lambda \) . 1-102-125-91 C613 1-124-480-11		F 10% 20%	25V 25V 50V 50V 25V	D537 D539 D602 D640	8-719-911-19 8-719-302-43 8-719-511-40 8-719-911-19	DIODE EL1Z DIODE S1VB40	
C614 1-124-480-11 C619 1-124-478-11 C620 1-123-875-11 C640 1-136-165-00 C641 1-101-006-00	ELECT 470MF ELECT 100MF ELECT 10MF FILM 0.1MF CERAMIC 0.047MF	20% 20% 20% 5%	25V 25V 50V 50V 50V	IC101 IC102 IC103	<1C> 8-759-632-89 8-759-972-43 8-759-403-44		
C642 1-102-129-00 C643 1-101-005-00 C644 1-101-005-00	CERAMIC 0.01MF CERAMIC 0.022MF CERAMIC 0.022MF	10%	50V 50V 50V	1C301 1C500	8-752-035-52 8-759-980-58	IC CXA1313S IC TDA8172	
C1701 1-102-976-00 C1702 1-102-973-00 C1703 1-124-477-11	CERAMIC 180PF CERAMIC 100PF ELECT 47MF	5% 5% 20%	50V 50V 16V	10531	*4-393-401-01 4-393-405-01 8-759-103-93 8-759-142-04	SPRING; IC500 SHEET (V), RADIATION; IC500 IC UPC393C IC UPC7893HR	0
<net< td=""><td>'WORK&gt;</td><td></td><td></td><td>10582</td><td></td><td>SPRING; IC581 IC UPC7893HF</td><td></td></net<>	'WORK>			10582		SPRING; IC581 IC UPC7893HF	
CP102 1-236-301-11 CP103 1-236-491-11 CP105 1-236-479-11 CP106 1-236-479-11		FILM		10601 10901	*4-368-683-01 8-759-112-06 \$8-759-171-05	SPRING: IC582 IC UPC78NO5H	

The components identified by shading and mark are critical for safety. Replace only with part number specified.

Les composants identifies par une trame et une marque ∆ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION				REMARK
<1F	BLOCK>			<res< td=""><td>ISTOR&gt;</td><td></td><td></td><td></td><td></td></res<>	ISTOR>				
1F201 1-464-755-21 <coi< td=""><td>IF BLOCK (IFE-450A)</td><td></td><td>R101 R102 R103 R105 R106</td><td>1-249-425-11 1-249-416-11 1-215-896-00 1-249-429-11 1-249-421-11</td><td>CARBON CARBON METAL OXIDE CARBON CARBON</td><td>4.7K 820 4.7K 10K 2.2K</td><td>5%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%</td><td>1/4W 1/4W 2W 1/4W 1/4W</td><td>F</td></coi<>	IF BLOCK (IFE-450A)		R101 R102 R103 R105 R106	1-249-425-11 1-249-416-11 1-215-896-00 1-249-429-11 1-249-421-11	CARBON CARBON METAL OXIDE CARBON CARBON	4.7K 820 4.7K 10K 2.2K	5%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%	1/4W 1/4W 2W 1/4W 1/4W	F
L101 1-408-421-00 L102 1-408-415-00 L201 1-408-408-00 L500 1-422-613-11 L501 1-459-148-00	INDUCTOR 100UH INDUCTOR 33UH INDUCTOR 8.2UH COIL, AIR CORE COIL		R107 R108 R109 R110	1-249-417-11 1-249-421-11 1-249-421-11 1-249-421-11	CARBON CARBON CARBON CARBON CARBON	1K 2.2K 2.2K 2.2K 2.2K	5%%%%% 5%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%	1/4W 1/4W 1/4W 1/4W 1/4W	
L503 1-422-613-11 L505 ▲ 1-410-669-31 L506 1-408-225-00 L507 1-421-541-00 L508 ▲ 1-424-210-11	BLOCK>  IF BLOCK (IFE-450A)  L>  INDUCTOR 100UH INDUCTOR 33UH INDUCTOR 8.2UH COIL, AIR CORE COIL  COIL, AIR CORE INDUCTOR 33UH INDUCTOR 3.3UH COIL, CHOKE 1000UH COIL, PIN MODULATION		R112 R113 R114 R115 R116	1-249-421-11 1-249-421-11 1-249-421-11 1-249-421-11 1-249-409-11	CARBON CARBON CARBON CARBON CARBON	2.2K 2.2K 2.2K 2.2K 2.2K	5% 5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
L509 1-422-613-11 L511 1-408-225-00 L512 1.459-973-21 L513 1-408-698-00 L514 1.408-698-21	COIL, AIR CORE INDUCTOR 3.3UH COIL, HORIZONTAL LINEARITY INDUCTOR 8.2UH INDUCTOR 8.2UH	and the second of the second o	R117 R118 R119 R120 R121	1-249-409-11 1-249-409-11 1-249-431-11 1-249-421-11 1-249-421-11	CARBON CARBON CARBON CARBON CARBON	220 220 15K 2.2K 2.2K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
L1701 1-408-413-00 <nec NL501 1-519-108-99</nec 	COIL, AIR CORE INDUCTOR 3.3UH COIL, HORIZONTAL LINEARITY INDUCTOR 8.2UH INDUCTOR 8.2UH INDUCTOR 22UH  INDUCTOR 22UH  INDUCTOR 2AUH  INDUCTOR 2AUH  INDUCTOR 2AUH		R122 R123 R124 R125 R126	1-249-421-11 1-249-421-11 1-249-421-11 1-249-421-11 1-249-421-11	CARBON CARBON CARBON CARBON CARBON	2.2K 2.2K 2.2K 2.2K 2.2K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
10M> 1.202-400-11	NULE>		R128 R129	1-249-425-11 1-249-425-11 1-249-437-11	CARBON CARBON CARBON	4.7K 4.7K	5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
<tra< td=""><td>NS1STOR&gt;</td><td></td><td>R133</td><td>1-249-421-11</td><td>CARBON</td><td>2.2K</td><td>5%</td><td>1/4W</td><td></td></tra<>	NS1STOR>		R133	1-249-421-11	CARBON	2.2K	5%	1/4W	
Q101 8-729-119-78 Q102 8-729-119-76 Q104 8-729-119-76 Q105 8-729-119-78	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SA1175-HFE TRANSISTOR 2SA1175-HFE TRANSISTOR 2SC2785-HFE		R134 R135 R136 R137	1-249-421-11 1-249-429-11 1-249-429-11 1-249-409-11	CARBON CARBON CARBON CARBON	2.2K 10K 10K 220	5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
Q107 8-729-119-78 Q108 8-729-119-78 Q170 8-729-119-78 Q201 8-729-119-78 Q301 8-729-119-76	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE		R138 R139 R140 R141 R142	1-249-425-11 1-249-421-11 1-249-439-11 1-247-903-00 1-249-437-11	CARBON CARBON CARBON CARBON CARBON	4.7K 2.2K 68K 1M 47K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q302 8-729-900-89 Q303 8-729-119-76 Q304 8-729-119-76 Q306 8-729-119-76	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SA1175-HFE TRANSISTOR 2SA1175-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SA1175-HFE TRANSISTOR 2SC2785-HFE		R143 R144 R145 R146 R147	1-249-437-11 1-215-896-00 1-249-429-11 1-247-903-00 1-249-429-11	CARBON METAL OXIC€ CARBON CARBON CARBON	47K 4.7K 10K 1M 10K	5% 5% 5% 5%	1/4W 2W 1/4W 1/4W 1/4W	F
Q310 8-729-119-78 Q311 8-729-119-78 Q312 8-729-119-76	TRANSISTOR 2SC2785-HFE TRANSISTOR DTC144ES  TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SA1175-HFE		R148 R149 R150 R151 R152	1-249-429-11 1-215-896-00 1-249-441-11 1-249-429-11 1-249-425-11	METAL OXIDE	10K 4.7K 100K 10K 4.7K	5% 5% 5% 5%	1/4W 2W 1/4W 1/4W 1/4W	F
Q313 8-729-119-78 Q314 8-729-119-78 Q351 8-729-119-78	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE		R153 R154 R156	1-249-429-11 1-249-429-11 1-249-409-11	CARBON CARBON CARBON	10K 10K 220	5% 5% 5% 5%	1/4W 1/4W 1/4W	
Q352     8-729-119-78       Q501     8-729-119-78       Q502     8-729-119-80       Q503     8-729-304-50	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2688-LK TRANSISTOR 2SD1941-06		R158 R159 R160 R161	1-249-429-11 1-249-437-11 1-247-887-00 1-249-409-11	CARBON CARBON CARBON CARBON	10K 47K 220K 220		1/4W 1/4W 1/4W 1/4W	
\$4-393-401-01 9504 8-729-119-78 9505 8-729-208-72 9506 8-729-119-76	SPRING: Q503 TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC3298B-Y TRANSISTOR 2SA1175-HFE		R162 R163 R164	1-249-409-11 1-249-421-11 1-249-409-11	CARBON CARBON CARBON	220 2.2K 220	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W	
			R165 R166	1-249-409-11 1-249-409-11	CARBON CARBON	220 220	5% 5%	1/4W 1/4W	



The components identified by shading and mark A are critical for safety.
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REF.NO. PART NO.	DESCRIPTION				REMARK	REF.NO.	PART NO.	DESCRIPTION				REMARK
R167 1-249-429-11 R168 1-249-429-11 R169 1-249-429-11 R170 1-249-429-11 R171 1-249-421-11	CARBON CARBON CARBON CARBON CARBON	10K 10K 10K 10K 2.2K	5% 5%	1/4W 1/4W 1/4W 1/4W 1-/4W		R330 R332 R333 R334 R335	1-249-421-11 1-247-895-00 1-249-409-11 1-249-420-11 1-249-441-11	CARBON CARBON CARBON	2.2K 470K 220 1.8K 100K	5% 5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R175 1-249-421-11 R176 1-249-421-11	CARBON CARBON CARBON CARBON	10K 2.2K 2.2K 2.2K 2.2K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		R337 R339 R340 R341	1-249-405-11 1-249-438-11 1-249-411-11 1-249-405-11 1-249-405-11	CARBON CARBON CARBON CARBON CARBON	56K 330 100 100	5 5555555555555555555555555555555555555	1/4W 1/4W 1/4W 1/4W	
R182 1-249-421-11		220 1k 1k 1k 2.2K		1/4W 1/4W 1/4W 1/4W 1/4W		R342 R343 R344 R345 R346 R347	1-249-405-11 1-249-405-11 1-249-405-11 1-215-869-11 1-249-413-11 1-259-884-11	CARBON CARBON CARBON METAL OXIDE CARBON CARBON	100 100 100 1K 470 4.7M		1/4W 1/4W 1/4W 1W 1/4W 1/4W	F
R184 1-249-417-11		2.2K 1K 1K 22K 2.2K		1/4W 1/4W 1/4W		R349 R350 R351 R352 R353		CARBON CARBON CARBON CARBON	220 3.3K 100K 100K 100K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R189 1-249-433-11 R190 1-249-421-11	CARBON CARBON CARBON CARBON	4.7K 22K 2.2K 2.2K 2.2K 2.2K		1/4W 1/4W 1/4W 1/4W		R354 R355 R356	1-249-433-11 1-249-433-11	CARBON CARBON CARBON CARBON	22K 22K 22K 47K 330K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R195 1-249-421-11 R196 1-249-421-11 R197 1-259-884-11 R198 1-249-417-11 R200 1-249-417-11		1K 2.2K 2.2K 4.7M 1K		1/4W 1/4W 1/4W 1/4W		R359 R360 R361 R362 R363	1-249-433-11 1-249-433-11 1-249-431-11	CARBON CARBON	22K 22K 15K 2.2K 2.2K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R201 1-249-425-11 R202 1-249-429-11 R203 1-249-435-11 R204 1-249-435-11	CARBON CARBON CARBON CARBON						1-249-405-11 1-249-405-11 1-249-437-11 1-249-417-11 1-249-417-11	CARBON CARBON	100 100 47K 1K 1K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R208 1-216-423-11 R209 1-249-417-11 R212 1-249-417-11 R301 1-215-448-00 R304 1-249-432-11	CARBON METAL OXIDE CARBON CARBON METAL	13K	5% 5% 5% 5% 1%	1W		0201	1-249-428-11 1-249-421-11 1-249-425-11 1-249-439-11 1-249-427-11	CARBON CARBON CARBON CARBON	8.2K 2.2K 4.7K 68K 6.8K		1/4W 1/4W 1/4W 1/4W 1/4W	
R305 1-247-899-11 R306 1-215-421-00 R307 1-249-405-11 R308 1-249-405-11	CARBON METAL CARBON CARBON CARBON	18K 680K 1K 100 100		1/4W 1/6W 1/4W 1/4W		R379 R380 R381 R382 R383	1-249-421-11 1-249-424-11 1-249-421-11 1-249-413-11 1-249-429-11	CARBON CARBON CARBON	2.2K 3.9K 2.2K 470 10K	5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R310 1-249-409-11 R311 1-249-409-11 R312 1-249-409-11 R313 1-249-409-11	CARBON CARBON CARBON CARBON	100 220 220 220 220 220	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		R385 R386 R500 R501	1-247-903-00 1-249-417-11 1-249-433-11 1-215-459-00	CARBON CARBON CARBON METAL METAL OXIDE	1M 1K 22K 39K 1.5	555555555555555555555555555555555555555	1/4W 1/4W 1/4W 1/6W 2W	F
R314 1-249-409-11 R315 1-249-417-11 R316 1-249-425-11 R317 1-249-429-11 R320 1-249-429-11	CARBON CARBON CARBON CARBON	220 1K 4.7K 10K 10K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		R502 R503 R504 R505 R507	1-216-371-00 1-249-437-11 1-215-446-00 1-216-453-00 1-249-439-11	CARBON METAL METAL OXIDE CARBON	47K 11K 270 68K	5% 5% 5% 5% 5%	1/4W 1/6W 2W 1/4W	F
R321 1-249-441-11 R322 1-249-428-11 R323 1-215-457-00 R324 1-249-405-11 R325 1-249-414-11	METAL CARBON CARBON	100K 8.2K 33K 100 560	5% 5% 1% 5% 5%	1/4W 1/4W 1/6W 1/4W 1/4W		R517 ▲	1-249-393-11 1-249-436-11 1-249-425-11 1-249-443-51 1-216-355-91	CARBON CARBON CARBON CARBON METAL OXIDE	39K 4.7K 0.47 3.3	5% 5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	F F F
R326 1-249-421-11 R327 1-249-417-11 R328 1-249-413-11 R329 1-249-425-11	CARBON CARBON	2.2K 1K 470 4.7K	5% 5%	1/4W 1/4W 1/4W 1/4W			1-249-482-11 3.1-215-871-91 3.1-249-465-91	CARBON METAL OXIDE CARBON	4.7 2.2K 47K	5% 5% 5%	1/2W 1W 1/4W	F F

 The components identified by in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used. Les composants identifies par une trame et une marque \( \Delta\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number

specified.





REF.NO. PART NO.	DESCRIPTION				REMARK	REF.NO.	PART NO.	DESCRIPTION	1		REMARK
R523 1-216-342-11 R524 1-215-890-11 R528 1-215-880-00	METAL OXIDE METAL OXIDE METAL OXIDE METAL OXIDE CARBON	680 0.27 470 10 5.6K	5% 5% 5% 5%	1W 1W 2W 2W 1/4W	E # E		1-249-429-11 <spa 1-519-422-11</spa 	RK GAP>	10K 5%	1/4W	
R531 1-216-456-00 R533 1-249-429-11 R534 1-249-437-11	CARBON METAL OXIDE CARBON CARBON CARBON		5% 5% 5% 5%	1/4W 2W 1/4W 1/4W 1/4W	F	T500 <i>A</i>		NSFORMER>	ASSY, FLYBA HORIZONTAL	CK (NX-2 Drive	2300)
R539 1-216-456-00	CARBON CARBON CARBON METAL OXIDE METAL	270K 150K 150K 820 4.7K	1%	1/4W 1/4W 1/4W 2W 1/6W	F		<tun ∆ 1-463-771-11</tun 	ER>			
R544 1-247-903-00 R545 1-247-903-00 R546 1-247-891-00	CARBON CARBON CARBON CARBON CARBON	100K 1M 1M 330K 1M	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W			<cry 1-567-505-11<="" 1-577-082-11="" td=""><td></td><td></td><td></td><td></td></cry>				
R551 1-249-413-11 R552 1-249-405-11 R553 1-249-401-11	CARBON	47 3.3K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W			*1-568-380-21	X BOARD		*****	:*****
R558 1-215-890-11 R559 & 1-216-380-91	CARBON METAL OXIDE	5.6K 4.7 470 8.2 220K	5% 5% 5% 5%	1/4W 1/4W 2W 2W 1/4W	F F F	C251		ACITOR>	1MF 0.022MF	20% 5%	50V 50V
R561 1-249-441-11 R562 1-247-734-11 R563 1-215-890-11 PR567 A. R568 1-249-431-11	CARBON	100K 39 470	5% 5% 5%	1/4W 1/2W 2W 1/4W	C	C252 C253 C254 C255	1-124-499-11 1-130-309-00 1-124-499-11	ELECT FILM ELECT	1MF 0.033MF 1MF	20% 5% 20% 20%	50V 100 <b>V</b> 50V
R569 1-249-425-11 R570 1-249-439-11 R571 A.1-213-048-51 R572 A 1-216-377-91	CARBON FUSIBLE METAL OXIDE	4.7K 68K 3.3 4.7	5% 5% 5% 5%	1/4W 1/4W 1W 2W	ř	C257 C258 C259 C260	1-124-902-00 1-124-499-11 1-124-499-11	ELECT ELECT	4.7MF 0.47MF 1MF 1MF	20% 20% 20% 20%	50V 50V 50V 50V
R573 A 1-216-377-91 R574 1-249-409-11 R575 1-249-405-11 R601 1-249-443-11 R606 1-216-425-11	CARBON CARBON CARBON	4.7 220 100 0.47 56	5% 5% 5%	2W 1/4W 1/4W 1/4W 1W		C261 C262 C263 C264 C265	1-124-499-11 1-124-499-11 1-124-499-11 1-123-875-11 1-136-170-00	ELECT ELECT ELECT FILM	1MF 1MF 10MF 0.27MF	20% 20% 20% 20% 5%	50V 50V 50V 50V
R620 1-249-440-11	CARBON	82K 10K 100K 33K 3.3K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		C266 C267 C268 C269 C270	1-123-875-11 1-131-368-00 1-124-499-11 1-131-347-00 1-124-499-11	ELECT TANTALUM ELECT TANTALUM ELECT	10MF 3.3MF 1MF 1MF 1MF	20% 10% 20% 20% 20%	50V 16V 50V 16V 50V
R626 1-249-434-11 R1701 1-249-417-11 R1702 1-249-417-11 R1703 1-249-417-11 R1704 1-249-417-11	CARBON CARBON CARBON CARBON CARBON	27K 1K 1K 1K 1K	5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C271 C272 C273 C274 C275	1-123-875-11 1-124-499-11 1-124-477-11 1-130-475-00 1-130-475-00	ELECT ELECT ELECT MYLAR MYLAR	10MF 1MF 47MF 0.0022MF 0.0022MF	20% 20% 20% 5% 5%	50V 50V 16V 50V 50V
R1705 1-249-417-11 R1706 1-249-417-11 R1707 1-249-417-11 R1708 1-249-417-11	CARBON CARBON CARBON CARBON	1 K 1 K 1 K 1 K	5% 5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		C276 C277 C278 C280 C281	1-102-074-00 1-123-875-11 1-124-499-11 1-123-875-11 1-123-875-11	CERAMIC ELECT ELECT ELECT ELECT	0.001MF 10MF 1MF 10MF 10MF	10% 20% 20% 20% 20%	50V 50V 50V 50V 50V
R1709 1-249-417-11 R1710 1-249-417-11 R1711 1-249-417-11 R1712 1-249-417-11 R1713 1-249-417-11 R1714 1-249-429-11	CARBON CARBON CARBON CARBON CARBON CARBON	1 K 1 K 1 K 1 K 1 K 1 O K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C282 C284 C285 C286	1-123-875-11 1-123-875-11 1-136-171-00 1-136-175-00	ELECT FILM	10MF 10MF 0.33MF 0.68MF	20% 20% 5% 5%	50V 50V 50V 50V





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Replace only with part number specified.

REF.NO. PA	ART NO.	DESCRIPTION			REMARK	REF.NO.	PART NO.	DESCRIPTION			REMARK
IC251 8-	<1C> -752-035-54	1C CXA1264S				D712	8-719-901-83 8-719-901-83 8-719-901-83 8-719-901-83	DIODE 1883 DIODE 1883			
	<res< td=""><td>ISTOR&gt;</td><td></td><td></td><td></td><td></td><td><jac< td=""><td>K&gt;</td><td></td><td></td><td></td></jac<></td></res<>	ISTOR>					<jac< td=""><td>K&gt;</td><td></td><td></td><td></td></jac<>	K>			
R252 1- R253 1- R254 1-	-249-409-11 -249-409-11 -249-409-11 -249-409-11 -249-420-11	CARBON CARBON CARBON CARBON CARBON	220 57 220 57 220 57 220 57 1.8K 57	1/4W 1/4W 1/4W 1/4W 1/4W		J701	-1-540-071-11 <coi< td=""><td>SOCKET, PICTO</td><td>JRE TUBE</td><td></td><td></td></coi<>	SOCKET, PICTO	JRE TUBE		
R257 1- R258 1- R259 1-	-249-405-11 -249-409-11 -249-409-11 -249-409-11 -249-409-11	CARBON CARBON CARBON CARBON CARBON	100 57 220 57 220 57 220 57 220 57	% 1/4W % 1/4W		L701 A L702 L703 L704 L705	1-408-417-31 1-408-421-00 1-408-420-00 1-408-410-00 1-408-411-00	INDUCTOR INDUCTOR INDUCTOR	470H 100UH 82UH 12UH 15UH		
R262 1-	-249-409-11 -249-409-11 -215-456-00	CARBON CARBON METAL	220 57 220 57 30K 17	1/4W 1/4W 1/6W		L706 L707	1-408-421-00 1-408-411-00		100UH 15UH		
******	********	*********	*******	********	*******		<tra< td=""><td>NSISTOR&gt;</td><td></td><td></td><td></td></tra<>	NSISTOR>			
*1· *1·	-506-348-99 -508-768-00	C BOARD, COMI	***** OR 3P OR (5MM P)	ITCH) 6P		Q701 Q702 Q703 Q704 Q705	8-729-119-78 8-729-200-17 8-729-326-11	TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25	SC2785-HFE SA1091 SC2611		
*4-	-379-160-01 -379-167-01	PLUG, CONNECT COVER (REAR I COVER (MAIN), ACITOR>	.ID), CV			Q709	8-729-200-17 8-729-200-17 8-729-326-11 8-729-119-78 8-729-255-12	TRANSISTOR 29 TRANSISTOR 29	SA1091 SC2611 SC2785-HFE		
C702 1- C703 1- C704 1-	-162-116-00 -136-601-11 -123-875-11 -123-946-00 -106-367-00	CERAMIC FILM ELECT ELECT MYLAR	680PF 0.01MF 10MF 4.7MF 0.01MF	10% 5% 20% 20% 10%	2KV 630V 50V 250V 200V	Q711 Q712 Q713 Q714 Q715	8-729-255-12	TRANSISTOR 25 TRANSISTOR 25	SC2551 SA1175-HFE SA1091		
C708 1 C709 1 C710 1	-102-116-00 -102-116-00 -102-116-00 -102-117-00 -126-233-11	CERAMIC CERAMIC CERAMIC CERAMIC ELECT	680PF 680PF 680PF 820PF 22MF	10% 10% 10% 10% 20%	50V 50V 50V 50V - 25V	Q716		TRANSISTOR 25	SA1091		
C712 1 C713 1 C714 1 C715 1	-102-116-00 -102-117-00 -162-622-11 -102-074-00 -102-074-00	CERAMIC CERAMIC CERAMIC CERAMIC CERAMIC	680PF 820PF 330PF 0.001MF 0.001MF	10% 10% 10% 10% 10%	50V 50V 6.3KV 50V	1 R703	1-216-392-11 1-202-848-00 1-202-815-11 1-202-846-00 1-202-549-00	SOLID SOLID	1.8 5% 680K 10% 47K 10% 470K 10% 100 10%	1/2W 1/2W 1/2W 1/2W 1/2W	F
C719 1 C720 1 C721 1 C730 1	-126-233-11 -126-233-11 -102-074-00 -102-116-00 -102-116-00	ELECT ELECT CERAMIC CERAMIC CERAMIC	22MF 22MF 0.001MF 680PF 680PF	20% 20% 10% 10%	25V 25V 50V 50V	R706 R707 R708 R709 R710	1-202-838-00 1-202-842-11 1-202-818-00 1-202-818-00 1-202-818-00	SOLID SOLID SOLID SOLID SOLID	100K 10% 220K 10% 1K 10% 1K 10% 1K 10%	1/2W 1/2W 1/2W 1/2W 1/2W	
	-102-116-00 <dio< td=""><td>CERAMIC</td><td>680PF</td><td>10%</td><td>50<b>V</b></td><td>R711 R712 R713 ▲ R714 R715</td><td>1-202-837-00 1-202-842-11 1-216-486-51 1-249-409-11 1-202-818-00</td><td>SOLID SOLID METAL OXIDE CARBON SOLID</td><td>82K 10% 220K 10% 8.2K 5% 220 5% 1K 10%</td><td>1/2W 1/2W 3W 1/4W 1/2W</td><td><b>F</b></td></dio<>	CERAMIC	680PF	10%	50 <b>V</b>	R711 R712 R713 ▲ R714 R715	1-202-837-00 1-202-842-11 1-216-486-51 1-249-409-11 1-202-818-00	SOLID SOLID METAL OXIDE CARBON SOLID	82K 10% 220K 10% 8.2K 5% 220 5% 1K 10%	1/2W 1/2W 3W 1/4W 1/2W	<b>F</b>
D702 8 D703 8 D704 8	-719-911-19 -719-911-19 -719-911-19 -719-911-19 -719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119				R716 A R717 R718	1-216-486-51 1-249-409-11 1-249-409-11 1-216-486-51 1-202-842-11	METAL OXIDE CARBON CARBON METAL OXIDE SOLID	8.2% 5% 220 5% 220 5%	3W 1/4W 1/4W 3W 1/2W	F. Committee
D707 8 D708 8	-719-911-19 -719-911-19 -719-911-19 -719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119				R723 R724 R725	1-249-405-11 1-249-405-11 1-249-429-11	CARBON CARBON CARBON	100 5% 100 5% 10K 5%	1/4W 1/4W 1/4W	

The components identified by shading and mark A are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.







REF.NO. PART NO.	DESCRIPTION				REMARK	REF.NO.	PART NO.	DESCRI	PTION	L		REMARK
R726 1-249-407-11 R727 1-249-429-11	CARBON CARBON	150 10K	5% 5% 5%	1/4W 1/4W		R54	1-249-437-11	CARBON	471	5%	1/4W	
R727 1-249-429-11 R728 1-249-407-11 R729 1-249-405-11 R730 1-249-407-11	CARBON	150 100 150	5% 5% 5%	1/4W 1/4W 1/4W				TCH>	mana Libilibo (Al	ar a sastema (	n skapi (bornto eta 1521)	eng i ga
R731 1-247-704-11 R732 1-247-704-11 R733 1-247-704-11 R739 1-249-433-11		220 220 220 22K 47K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 2W	F F	551 ▲ 552 553 554 555	. 1-571-532-21 1-571-532-21 1-571-532-21 1-571-532-21 1-571-532-21	SWITCH, SWITCH,	TACTIL TACTIL TACTIL	OWER)	Lings (1995) - 1996 George Angles Construction - 1998	Man Man et e
R741 1-249-417-11	CARBON	1 K		1/4W 1/4W		S56 S57	1-571-532-21 1-571-532-21	SWITCH, SWITCH,	TACTIL TACTIL			
R742 1-249-429-11 R743 1-249-429-11 R744 1-247-725-11 R745 1-247-713-11	CARBON CARBON CARBON CARBON	10K 10K 10K 1K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	F F		************* *A-1385-052-A				******	t*********
R746 1-215-902-11 R747 1-247-725-11 R749 1-249-437-11 R750 1-249-409-11 R751 1-249-397-11	METAL OXIDE CARBON CARBON CARBON CARBON	47K 10K 47K 220 22	5% 5% 5% 5%	1W 1/4W 1/4W 1/4W 1/4W	F		*1-508-765-00 *1-560-123-00 *1-564-517-11 *1-564-518-11 *1-565-494-11 *4-341-752-01	PIN, COM PLUG, CO PLUG, CO PLUG, CO CONNECTO	**************************************	MM PI1 2.5MM P P TO BO	) 3P ARD 18P	Y2454,
R752 1-249-397-11 R753 1-249-397-11 R754 1-249-429-11 R755 1-249-411-11	CARBON CARBON CARBON	22 22 10K 330	5% 5%	1/4W 1/4W 1/4W 1/4W					EY2456, <b>E</b> Y2	457, E	Y2458)	
R757 1-249-425-11 R777 1-249-441-11	CARBON CARBON	4.7K		1/4W 1/4W		C2451	1-124-257-00	ACITOR> ELECT			20%	50V
	RIABLE RESISTOR	?>				C2454	1-124-925-11 1-126-096-11 1-123-875-11	ELECT	2.2M 10MF 10MF		20% 20% 20% 5%	50Y 35Y 50Y 50Y
RV701 1-230-641-11 RV702A 1-230-619-11	RES, ADJ, MET	TAL GLA	ZE 2.2	em Om 191		C2457	1-136-170-00 1-124-925-11	FILM	0.27 2.21	F	20%	50¥
**************************************		*****	*****	*****	******	C2461 C2462	1-124-618-11 1-124-925-11 1-126-233-11 1-136-170-00	ELECT ELECT	2200 2.2N 22MF 0.27	F	20% 20% 20% 5%	35V 50V 25V 50V
	******	ao ao				C2466	1-124-925-11	ELECT	2.2	F	20%	50V 50V
*1-564-512-11 *1-564-513-11 *4-374-987-01 *4-381-686-01	PLUG, CONNEC' GUIDE, LIGHT	TOR 101	)	L		C2470	1-124-925-11 1-126-233-11 1-124-499-11 1-124-618-11	ELECT ELECT	22MF 1MF 2200		20% 20% 20% 20%	50V 50V 35V
<cai< td=""><td>PACITOR&gt;</td><td></td><td></td><td></td><td></td><td>C2474</td><td>1-124-484-11 1-124-484-11 1-136-165-00</td><td>ELECT</td><td>220) 220) 0.1)</td><td>F</td><td>20% 20% 5% 5%</td><td>35V 35V 50V</td></cai<>	PACITOR>					C2474	1-124-484-11 1-124-484-11 1-136-165-00	ELECT	220) 220) 0.1)	F	20% 20% 5% 5%	35V 35V 50V
C52 1-124-499-11 C53 1-124-902-00 C55 1-102-114-00	ELECT	1MF 0.47MI 470PF	?	20%	50V 50V 50V	C2476	1-136-165-00 1-124-618-11	FILM	0.11 2200	F	5% 20%	50V 35V
	ODE>				301	C2478 C2479 C2480 C2481 C2482	1-126-233-11 1-124-499-11 1-124-484-11 1-124-618-11	ELECT ELECT ELECT ELECT ELECT	22MF 1MF 220M 220M 220M	iF IF	20% 20% 20% 20% 20%	50Y 50Y 35Y 35Y 35Y
*4-374-906-01 B52	HOLDER (TV/V DIODE TLR124 HOLDER (TV/V	), LED ), LED				C2483 C2484	1-124-618-11 1-136-165-00	ELECT FILM	2200 0.11	MF IF	20% 5% 5%	35Y 50Y
D53 8-719-812-41 *4-374-906-01 D54 8-719-911-19		), LED	; D53			C2486	1-136-165-00 1-126-233-11 1-126-233-11	ELECT	0.11 22M 22M	•	57 207 207	507 507 507
							<d[6< td=""><td>DE&gt;</td><td></td><td></td><td></td><td></td></d[6<>	DE>				
<1C I C 51 8-741-139-80							8-719-911-19 8-719-911-19					
<re><re< td=""><td>SISTOR&gt;</td><td></td><td></td><td></td><td></td><td></td><td>&lt;10</td><td>&gt;</td><td></td><td></td><td></td><td></td></re<></re>	SISTOR>						<10	>				
R53 1-249-409-11	CARBON	220	5%	1/4W		I C2451	LA8-759-980-43	IC TDA2	009A			

### KV-27HSR10 RM-763







NESCRIPTIO

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number

specified.

REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO	. PART NO.	DESCRIPTION			REMARK
IC2452A.8-759-980-43	IC TDA2009A		R2497 R2498	1-249-421-11 1-249-421-11	CARBON CARBON	2.2K 5% 2.2K 5%	1/4W 1/4W	
<10	LINK>		*****	******	**********	********	******	*******
PS2401 1-532-984-11 PS2402 1-532-984-11				*1-629-620-11	N BOARD			
<tra< td=""><td>NSISTOR&gt;</td><td></td><td></td><td>*1-564-505-11</td><td>PLUG, CONNEC</td><td>CTOR 2P</td><td></td><td></td></tra<>	NSISTOR>			*1-564-505-11	PLUG, CONNEC	CTOR 2P		
Q2451 8-729-119-78 Q2452 8-729-119-78	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE			<cap< td=""><td>ACITOR&gt;</td><td></td><td></td><td></td></cap<>	ACITOR>			
02455 8-729-119-78 02456 8-729-119-76 02457 8-729-119-78	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SA1175-HFE TRANSISTOR 2SC2785-HFE		C890 C891	1-124-925-11 1-124-925-11	ELECT	2.2MF 2.2MF	20% 20%	50V 50V
Q2458 8-729-119-76	TRANSISTOR 2SA1175-HFE		*****	***********			******	*******
<res< td=""><td>SISTOR&gt;</td><td></td><td></td><td>*A-1394-173-A</td><td>U BUARD, CUM</td><td></td><td></td><td></td></res<>	SISTOR>			*A-1394-173-A	U BUARD, CUM			
R2424 1-215-421-00		/6₩		*1-564-519-11 1-564-523-11	PLUG, CONNEC	CTOR 8P		
R2425 1-215-409-00 R2426 1-215-409-00 R2427 1-215-421-00 R2433 1-215-437-00	METAL 330 1% 1, METAL 330 1% 1, METAL 1K 1% 1,			*1-566-941-11 *1-568-377-11 *4-341-752-01	CONNECTOR, H	IINGE (TAB)	7P	
R2438 1-215-437-00	METAL 4.7K 1% 1.	/6W	1	<caf< td=""><td>ACITOR&gt;</td><td></td><td></td><td></td></caf<>	ACITOR>			
R2439 1-249-441-11 R2440 1-249-413-11	CARBON 470 5% 1.	/4W /4W	C401	1-126-233-11		22MF	20%	25V 50V
R2441 1-249-435-11 R2442 1-249-441-11	CARBON 33K 5% 1. CARBON 100K 5% 1.	/4W /4W	C402 C403	1-124-499-11	CERAMIC ELECT	0.01MF 1MF	20%	50V
R2443 1-249-413-11	CARBON 470 5% 1.	/4W	C404 C405	1-124-499-11 1-126-233-11	ELECT ELECT	1MF 22MF	20% 20%	50 V 25 V
R2444 1-249-430-11 R2445 1-249-430-11	CARBON 12K 5% 1.	/4W /4W	C407	1-124-499-11	ELECT ELECT	1MF 1MF	20% 20%	50V 50V
R2446 1-249-441-11 R2447 1-249-439-11	CARBON 100K 5% 1. CARBON 68K 5% 1.	/40 /40	C408 C409 C410	1-124-499-11 1-126-233-11 1-123-875-11	ELECT ELECT	22MF 10MF	20% 20% 20%	25V 50V
R2451 1-249-441-11		/4W /4W	C411	1-126-233-11	ELECT	·22MF	20%	25V
R2452 1-249-441-11 R2453 1-249-405-11 R2454 1-215-439-00	CARBON 100 5% 1.	/4W /6W	C413 C414	1-124-499-11	ELECT ELECT	1MF 1MF	20% 20%	50V 50V
R2455 1-215-427-00	METAL 1.8K 1% 1	/6W	C415 C418	1-126-233-11	ELECT ELECT	22MF 100MF	20% 20%	25V 25V
R2456 1-249-441-11 R2457 1-249-441-11	CARBON 100K 5% 1 CARBON 100K 5% 1	/4W /4W	C419	1-124-478-11	ELECT	100MF	20%	25V
R2458 1-249-405-11 R2459 1-249-421-11	CARBON 100 5% 1	/4W /4W	C420 C421	1-124-477-11 1-126-103-11	ELECT ELECT	47MF 470MF	20% 20%	16V 16V
R2460 1-249-421-11	CARBON 2.2K 5% 1 CARBON 2.2K 5% 1	/4W	C422 C423	1-126-103-11 1-101-004-00	ELECT CERAMIC	470MF 0.01MF	20%	16V 50V
R2463 1-249-435-11 R2464 1-249-441-11	CARBON 100K 5% 1	/4W /4W	C424	1-126-233-11		22MF	20%	25V
R2465 1-215-423-00 R2466 1-215-417-00	METAL 1.2K 1% 1 METAL 680 1% 1	/6W /6W	C425	1-126-233-11 1-124-477-11	ELECT	22MF 47MF	20% 20%	25V 16V
R2468 1-215-387-00		/6W	C428 C429	1-126-233-11 1-124-589-11	ELECT ELECT	22MF 47MF	20% 20%	25V 16V
R2469 1-215-387-00 R2470 \( \text{\Lambda} 1-249-385-51 \)		/6W /4W F	C430	1-126-233-11	ELECT	22MF	20%	251
R2471 A 1-249-385-51 R2473 1-249-421-11	CARBON 2.2K 5% 1	/4W F /4W	C431 C433	1-124-478-11 1-126-233-11	ELECT ELECT	100MF 22MF	20% 20%	25V 25V
R2474 1-249-421-11		/4W	C434	1-126-233-11 1-124-499-11	ELECT ELECT	22MF 1MF	20% 20%	25¥ 50¥
R2483 1-215-439-00 R2484 1-215-427-00	METAL 1.8K 1% 1	./6₩ ./6₩ ./4₩	C436	1-124-499-11	ELECT	1MF	20% 20%	50V 25V
R2487 1-249-430-11 R2488 1-249-430-11 R2489 1-215-423-00	CARBON 12K 5% 1	/4W /4W	C437 C438 C439	1-126-233-11 1-126-233-11 1-126-233-11	ELECT ELECT ELECT	22MF 22MF 22MF	20% 20% 20%	25V 25V 25V
		./6W ./6W	C440	1-124-477-11 1-124-477-11 1-124-477-11	ELECT	47MF 47MF	20% 20% 20%	16V 16V
R2491 1-215-387-00 R2492 1-215-417-00 R2493 1-215-387-00	METAL 680 1% 1	/6W  /6W	C441	1-126-233-11		22MF	20%	254
R2494 1-249-385-11 R2495 1-249-385-11	CARBON 2.2 5% 1	/4W F  /4W F	C445 C462	1-124-589-11 1-124-589-11	ELECT	47MF 47MF	20% 20% 20%	16V 16V
	CHROON 2.2 JA 1	L, IM 1	C490	1-101-004-00		0.01MF	20/8	50Y



	PART NO.				REMARK	REF.NO.	PART NO.	DESCRIPTION				REMARK	
C491 C492 C493	1-124-477-11 1-126-233-11 1-124-477-11 1-102-973-00 1-124-589-11	ELECT ELECT ELECT	47MF 22MF 47MF	20% 16V 20% 25V 20% 16V		<resistor></resistor>							
				5% 20%	20% 16V	R402   1-   R403   1-	1-247-804-11 1-247-804-11 1-249-434-11	CARBON CARBON	75 75 27K	5% 5%	1/4W 1/4W 1/4W		
U14U3	1-124-589-11		16V	R405					1/4W 1/4W				
D401 D402 D403 D408	<pre></pre>	DIODE RD6.8E	S-B2 S-B2 S-B2			R406 R407 R409 R410 R411	1-249-434-11 1-247-804-11 1-249-434-11 1-247-885-00 1-247-804-11	CARBON CARBON CARBON	27K 75 27K 180K 75	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		
D409 D410	8-719-109-97 8-719-109-97	DIODE RD6.8E	S-B2 S-B2			R413 R414 R415	1-249-434-11 1-247-885-00 1-249-434-11	CARBON	27K 180K	5% 5%	1/4W 1/4W 1/4W		
D411 D415 D418	8-719-109-97 8-719-110-17	DIODE RD6.8E DIODE RD10ES DIODE 1SS119	S-B2 -B2			R416 R417	1-247-885-00	CARBON CARBON	27K 180K 470K		1/4W 1/4W		
D419	8-719-911-19	DIODE 155119	S-B2			R418 R419 R420	1-247-895-00	CARBON CARBON CARBON	1K 470K 1K 75 470K	5% 5%	1/4W 1/4W 1/4W		
D422 D423	8-719-109-97 8-719-109-97	DIODE RD6.8E DIODE RD6.8E	S-B2 S-B2			R421 R422	1-247-804-11 1-247-895-00	CARBON CARBON	75 470K		1/4W 1/4W		
D421 8-719-109-97 D10DE RD6.8ES-B2 D423 8-719-109-97 D10DE RD6.8ES-B2  C1C>  IC401 8-759-710-68 IC NJM2245S IC402 8-759-710-68 IC NJM2245S IC405 8-759-710-69 IC NJM2233BS IC444 8-752-032-27 IC CXA1114P IC1401 8-759-710-69 IC NJM2233BS  CJACK>  J401 1-565-931-11 TERMINAL BLOCK, S 3P J402 1-565-840-11 PIN JACK BLOCK 6P J403 1-565-931-11 TERMINAL BLOCK, S 3P J404 1-565-838-11 PIN JACK BLOCK 2P  COIL>  L401 1-408-412-00 INDUCTOR 18UH L404 1-410-663-31 INDUCTOR 10UH  CTRANSISTOR>  Q401 8-729-119-78 TRANSISTOR 28C2785-HFE						R423 R424 R425	1-247-895-00 1-247-895-00 1-247-895-00	CARBON CARBON	470K 470K 470K	5% 5% 5%	1/4W 1/4W 1/4W		
IC401 IC402 IC405	8-759-710-68 8-759-710-68 8-759-710-69	IC NJM2245S IC NJM2245S IC NJM2233BS				R426 R427	1-249-424-11 1-247-895-00	CARBON CARBON	3.9K 470K	5% 5%	1/4W 1/4W		
IC444 IC1401	8-752-032-27 8-759-710-69	IC CXA1114P IC NJM2233BS				R428 R429 R432	1-249-424-11 1-249-434-11 1-249-405-11	CARBON CARBON	3.9K 27K 100	5%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%	1/4W 1/4W 1/4W		
	<jac< td=""><td>K&gt;</td><td></td><td></td><td></td><td>R433</td><td>1-249-413-11 1-249-409-11</td><td>CARBON</td><td>470 220</td><td>_</td><td>1/4W 1/4W</td><td></td></jac<>	K>				R433	1-249-413-11 1-249-409-11	CARBON	470 220	_	1/4W 1/4W		
J401 J402 J403 J404	1-565-931-11 1-565-840-11 1-565-931-11 1-565-838-11	TERMINAL BLO PIN JACK BLO TERMINAL BLO PIN JACK BLO	CK, S 3P CK 6P CK, S 3P CK 2P			R435 R436 R437 R438 R439	1-249-403-11 1-249-425-11 1-247-885-00 1-249-405-11 1-249-413-11	CARBON	68 4.7K 180K 100 470	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		
<c01f></c01f>					R440 R441	1-249-417-11 1-249-409-11	CARBON	1K 220	5% 5%	1/4W 1/4W			
L401 L404	1-408-412-00 1-410-663-31	INDUCTOR INDUCTOR	18UH 10UH			R447 R448 R449	1-249-409-11 1-249-409-11 1-249-413-11	CARBON CARBON CARBON	220 220 <b>4</b> 70	5% 5% 5% 5%	1/4W 1/4W 1/4W		
0404	<tra< td=""><td>NSISTOR&gt;</td><td>CCCTOE HEE</td><td></td><td></td><td>R450 R451</td><td>1-249-409-11 1-249-421-11</td><td>CARBON</td><td>220 2.2K</td><td></td><td>1/4W 1/4W 1/4W</td><td></td></tra<>	NSISTOR>	CCCTOE HEE			R450 R451	1-249-409-11 1-249-421-11	CARBON	220 2.2K		1/4W 1/4W 1/4W		
Q403	8-729-119-76	TRANSISTOR 2	SA1175-HFE			R452 R457 R458	1-249-433-11 1-249-405-11 1-249-405-11	CARBON CARBON CARBON	22K 100 100	5% 5% 5%	1/4W 1/4W 1/4W		
Q404 Q405	8-729-119-78 8-729-119-78	TRANSISTOR 2 TRANSISTOR 2	SC2785-HFE			R459 R460	1-249-417-11 1-249-405-11	CARBON CARBON	1K 100	5% 5%	1/4W 1/4W 1/4W		
9406 9407 9408 9409	8-729-119-78 8-729-119-78 8-729-119-78 8-729-119-78	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SC2785-HFE SC2785-HFE			R461 R462 R463	1-249-417-11 1-249-417-11 1-249-405-11	CARBON CARBON CARBON	1 K 1 K 100	5% 5% 5% 5%	1/4W 1/4W 1/4W		
Q410 Q411	8-729-119-78 8-729-119-78	TRANSISTOR 2 TRANSISTOR 2	SC2785-HFE			R465 R466 R467	1-249-417-11 1-249-405-11 1-249-405-11	CARBON CARBON CARBON	1K 100 100	5% 5%	1/4W 1/4W 1/4W		
0412 0413 0414	8-729-119-76 8-729-119-76 8-729-119-76	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SA1175-HFE SA1175-HFE			R468 R469	1-249-433-11 1-249-433-11	CARBON CARBON	22K 22K	5% 5% 5%	1/4W 1/4W		
Q415 Q416	8-729-119-78 8-729-119-78	TRANSISTOR 2 TRANSISTOR 2	SC2785-HFE			R470 R471 R472	1-249-403-11 1-249-403-11 1-249-403-11	CARBON CARBON CARBON	68 68 68	5% 5% 5%	1/4W 1/4W 1/4W		
Q491 Q492 Q1401	8-729-119-78 8-729-119-78	TRANSISTOR 2 TRANSISTOR 2	SC2785-HFE SC2785-HFE			R474 R475	1-249-405-11 1-249-417-11	CARBON CARBON	100 1K	5% 5% 5%	1/4W 1/4W		
41.40]	0 147-117-10	INDIGICANNII	JOGIOJ-HEC			R476	1-249-433-11	CARBON	22 <b>K</b>	5 <b>%</b>	1/4W		



3-750-053-21 3-750-053-31 \*4-384-027-01

DESCRIPTION

\*4-393-649-01 CUSHION (UPPER) (ASSY) \*4-393-650-01 CUSHION (LOWER) (ASSY) \*4-393-651-01 INDIVIDUAL CARTON

MANUAL, INSTRUCTION MANUAL, INSTRUCTION (CND ONLY) BAG, PROTECTION

The components identified by shading and mark  $\hat{\Lambda}$  are critical for safety. Replace only with part number specified.

REMARK

REF.NO.	PART NO.	DESCRIPTION				REMARK	REF.NO.	PART	NO.
R480 R481	1-249-433-11 1-249-433-11	CARBON CARBON CARBON CARBON METAL	22K 22K 22K 1K 27K	5% 5% 5% 5% 1%	1/4W 1/4W 1/4W 1/4W 1/6W			3-750 4-384* 4-393*	-053 -027 -649
R487	1-215-475-00 1-215-455-00 1-215-475-00 1-249-433-11 1-249-433-11	METAL METAL METAL CARBON CARBON	180K 27K 180K 22K 22K	1% 1% 1% 5% 5%	1/6W 1/6W 1/6W 1/4W 1/4W				
R490 R491 R492 R493 R494	1-249-417-11 1-249-417-11 1-249-417-11 1-249-431-11 1-249-429-11	CARBON CARBON CARBON CARBON CARBON	1 K 1 K 1 K 1 5 K 1 0 K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W				
R496 R497 R498	1-249-417-11 1-249-425-11 1-249-417-11 1-249-417-11 1-249-405-11	CARBON CARBON CARBON CARBON CARBON	1K 4.7K 1K 1K 100	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W				
R1402 R1403 R1420 R1421 R1422	1-249-405-11 1-249-417-11 1-249-413-11 1-249-413-11 1-249-405-11	CARBON CARBON CARBON CARBON CARBON	100 1K 470 470 100	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W				
R1423 R1424 R1425	1-249-441-11 1-249-429-11 1-249-429-11	CARBON CARBON CARBON	100K 10K 10K	5% 5% 5%	1/4W 1/4W 1/4W		1 1 1 1 1 1 1		
	<s₩i< td=""><td>тсн&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></s₩i<>	тсн>							
\$401 \$402	1-571-729-11 1-554-303-21								
*****	*1-629-628-11	**************************************	*****	*****	******	******			
*****			*****	*****	******	******			
Â	\(\lambda. 1-426-350-21\) \(\lambda. 1-451-275-11\)	COIL, DEMAGNE DEFLECTION YO MAGNET, DISK;	TIZATI KE (Y2 10MM (	ON 8PFA)	15MM ø				
A	1-544-095-11 *1-556-945-21 \$\( 1-559-396-11\)	SPEAKER CABLE, P-P CORD, POWER	IDGE 1	5P					
	8-741-159-30	IC SBX1593-01							
							[   		
*****					******	******	1 1 1 2 6		
	******	*******				DEWARY			
	PART NU.	DESCRIPTION				KEMARK 			
				M-763)	)		1		
	R479 R480 R481 R483 R484 R485 R486 R487 R488 R490 R491 R492 R492 R493 R494 R495 R496 R497 R498 R1401 R1402 R1403 R1420 R1421 R1422 R1423 R1425	R480 1-249-433-11 R481 1-249-433-11 R481 1-249-433-11 R483 1-249-417-11 R484 1-215-455-00 R485 1-215-475-00 R486 1-215-475-00 R487 1-215-475-00 R488 1-249-433-11 R490 1-249-417-11 R491 1-249-417-11 R492 1-249-417-11 R492 1-249-417-11 R493 1-249-429-11 R495 1-249-429-11 R496 1-249-425-11 R497 1-249-417-11 R498 1-249-417-11 R498 1-249-405-11 R1402 1-249-405-11 R1402 1-249-405-11 R1402 1-249-405-11 R1402 1-249-405-11 R1402 1-249-405-11 R1402 1-249-417-11 R1401 1-249-405-11 R1402 1-249-405-11 R1402 1-249-405-11 R1402 1-249-405-11 R1403 1-249-417-11 R1404 1-249-405-11 R1405 1-249-405-11 R1407 1-249-405-11 R1408 1-249-417-11 R1409 1-249-405-11 R1409 1-249-405-11 R1401 1-249-405-11 R1402 1-249-405-11 R1402 1-249-405-11 R1403 1-249-417-11 R1401 1-249-405-11 R1402 1-249-405-11 R1403 1-249-417-11 R1401 1-249-405-11 R1401 1-249-405-11 R1402 1-249-405-11 R1402 1-249-405-11 R1403 1-249-417-11 R1401 1-249-405-11 R1401 1-249-405-11 R1401 1-249-405-11 R1401 1-249-405-11 R1402 1-249-405-11 R1401 1-249-4	R479 1-249-433-11 CARBON R480 1-249-433-11 CARBON R481 1-249-433-11 CARBON R481 1-249-433-11 CARBON R482 1-215-455-00 METAL R485 1-215-475-00 METAL R486 1-215-455-00 METAL R487 1-215-475-00 METAL R488 1-249-433-11 CARBON R489 1-249-433-11 CARBON R490 1-249-417-11 CARBON R491 1-249-417-11 CARBON R492 1-249-417-11 CARBON R493 1-249-431-11 CARBON R494 1-249-429-11 CARBON R495 1-249-417-11 CARBON R496 1-249-425-11 CARBON R497 1-249-417-11 CARBON R498 1-249-417-11 CARBON R498 1-249-417-11 CARBON R498 1-249-417-11 CARBON R498 1-249-417-11 CARBON R1401 1-249-405-11 CARBON R1401 1-249-405-11 CARBON R1402 1-249-413-11 CARBON R1420 1-249-413-11 CARBON R1421 1-249-413-11 CARBON R1422 1-249-413-11 CARBON R1422 1-249-413-11 CARBON R1422 1-249-429-11 CARBON R1423 1-249-429-11 CARBON R1424 1-249-429-11 CARBON R1425 1-249-429-11 CARBON R1426 1-554-303-21 SWITCH, KEY B  ***********************************	R479 1-249-433-11 CARBON 22K R480 1-249-433-11 CARBON 22K R481 1-249-433-11 CARBON 22K R481 1-249-433-11 CARBON 1K R484 1-215-455-00 METAL 27K R485 1-215-455-00 METAL 27K R486 1-215-455-00 METAL 27K R487 1-215-455-00 METAL 27K R487 1-215-475-00 METAL 180K R488 1-249-433-11 CARBON 22K R489 1-249-433-11 CARBON 22K R489 1-249-433-11 CARBON 22K R490 1-249-417-11 CARBON 1K R491 1-249-417-11 CARBON 1K R492 1-249-417-11 CARBON 1K R493 1-249-417-11 CARBON 1K R494 1-249-429-11 CARBON 1OK R495 1-249-425-11 CARBON 1K R496 1-249-425-11 CARBON 1K R497 1-249-405-11 CARBON 1K R498 1-249-417-11 CARBON 1K R498 1-249-417-11 CARBON 1K R498 1-249-417-11 CARBON 1K R498 1-249-417-11 CARBON 1C R1401 1-249-405-11 CARBON 1OO R1402 1-249-413-11 CARBON 1OO R1403 1-249-413-11 CARBON 1C R1421 1-249-405-11 CARBON 1OO R1422 1-249-405-11 CARBON 1OO R1421 1-249-405-11 CARBON 1OO R1422 1-249-405-11 CARBON 1OO R1423 1-249-417-11 CARBON 1C R1424 1-249-429-11 CARBON 1OO R1425 1-249-429-11 CARBON 1OO R1426 1-254-303-21 SWITCH, SLIDE S401 1-571-729-11 SWITCH, SLIDE S402 1-554-303-21 SWITCH, KEY BOARD  ***********************************	R479	R479 1-249-433-11 CARBON 22K 5% 1/4W R480 1-249-433-11 CARBON 22K 5% 1/4W R481 1-249-433-11 CARBON 22K 5% 1/4W R481 1-249-433-11 CARBON 2K 5% 1/4W R483 1-249-417-11 CARBON 1K 5% 1/4W R484 1-215-455-00 METAL 27K 1% 1/6W R486 1-215-455-00 METAL 27K 1% 1/6W R487 1-215-475-00 METAL 180K 1% 1/6W R487 1-215-475-00 METAL 180K 1% 1/6W R487 1-215-475-00 METAL 27K 1% 1/6W R487 1-215-475-00 METAL 27K 1% 1/6W R487 1-215-475-00 METAL 27K 1% 1/6W R487 1-249-433-11 CARBON 22K 5% 1/4W R489 1-249-437-11 CARBON 1K 5% 1/4W R491 1-249-417-11 CARBON 1K 5% 1/4W R491 1-249-417-11 CARBON 1K 5% 1/4W R491 1-249-417-11 CARBON 1K 5% 1/4W R493 1-249-431-11 CARBON 1K 5% 1/4W R493 1-249-447-11 CARBON 1K 5% 1/4W R496 1-249-425-11 CARBON 1K 5% 1/4W R498 1-249-417-11 CARBON 1K 5% 1/4W R1420 1-249-413-11 CARBON 1K 5% 1/4W R1420 1-249-413-11 CARBON 100 5% 1/4W R1422 1-249-405-11 CARBON 100 5% 1/4W R1422 1-249-429-11 CARBON 100 5% 1/4W R1425 1	R479 .1-249-433-11 CARBON 22K 57 1/4W R481 1-249-433-11 CARBON 22K 57 1/4W R481 1-249-433-11 CARBON 22K 57 1/4W R483 1-249-417-11 CARBON 1K 57 1/4W R484 1-215-455-00 METAL 27K 11 1/6W R486 1-215-455-00 METAL 27K 11 1/6W R486 1-215-455-00 METAL 180K 12 1/6W R488 1-249-433-11 CARBON 22K 52 1/4W R490 1-249-417-11 CARBON 1K 52 1/4W R491 1-249-417-11 CARBON 1K 52 1/4W R491 1-249-417-11 CARBON 1K 52 1/4W R493 1-249-417-11 CARBON 1K 52 1/4W R493 1-249-417-11 CARBON 1K 52 1/4W R494 1-249-429-11 CARBON 1K 52 1/4W R495 1-249-417-11 CARBON 1K 52 1/4W R496 1-249-425-11 CARBON 1K 52 1/4W R497 1-249-417-11 CARBON 1K 52 1/4W R498 1-249-425-11 CARBON 1K 52 1/4W R498 1-249-425-11 CARBON 1K 52 1/4W R498 1-249-417-11 CARBON 1K 52 1/4W R1401 1-249-405-11 CARBON 1K 52 1/4W R1420 1-249-413-11 CARBON 1K 52 1/4W R1421 1-249-413-11 CARBON 1K 52 1/4W R1422 1-249-417-11 CARBON 1K 52 1/4W R1422 1-249-417-11 CARBON 1K 52 1/4W R1421 1-249-413-11 CARBON 1K 52 1/4W R1422 1-249-417-11 CARBON 1K 52 1/4W R1421 1-249-413-11 CARBON 1K 52 1/4W R1422 1-249-417-11 CARBON 1K 52 1/4W R1421 1-249-413-11 CARBON 10K 52 1/4W R1422 1-249-429-11 CARBON 10K 52 1/4W R1421 1-249-439-11 CARBON 10K 52 1/4W R1421 1-249-439-11 CARBON 10K 52 1/4W R1422 1-249-429-11 CARBON 10K 52 1/4W R1421 1-249-439-11 CARBON 10K 52 1/4W R1421 1-249-439-11 CARBON 10K 52 1/4W R1421 1-249-439-11 CARBON 10K 52 1/4W R1421 1-259-390-11 CARBON 10K 52 1/4W R1421 1-249-439-11 CARBON 10K 52 1/4W R1421 1-259-390-11 CARBON 10K 52 1/4W R1421 1-269-30-21 COIL DEMACRITICATION Δ-1-51-275-11 DEFLECTION 10KE (Y2BFR) 1-54-095-11 SERAKER 1-54-095-11 SERAKER 1-54-095-11 SERAKER 1-556-945-21 CABLOR MARKET 10KER MARKET 10KER MARKET 10KER MAR	R479	R479

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# SERVICE MANUAL

US Model Chassis No. SCC-C59C-A Canadian Model
Chassis No. SCC-C60C-A

## **SUPPLEMENT-1**

File this supplement with the Service Manual.

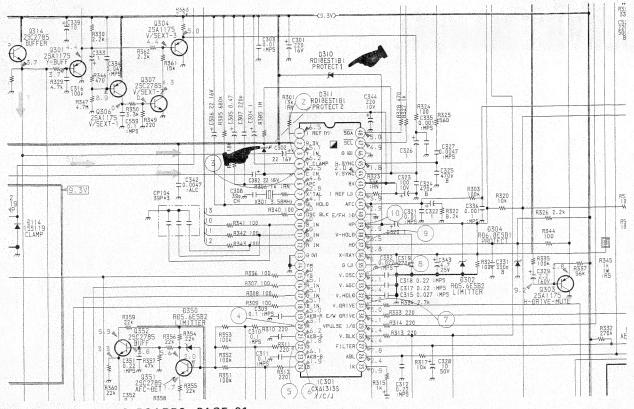
### INTRODUCTION

Addition: D311 and D312 on A BOARD Addition: D251, D252 and D253 on X BOARD

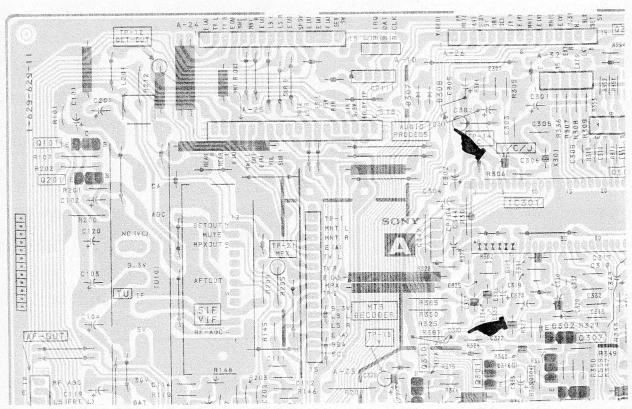


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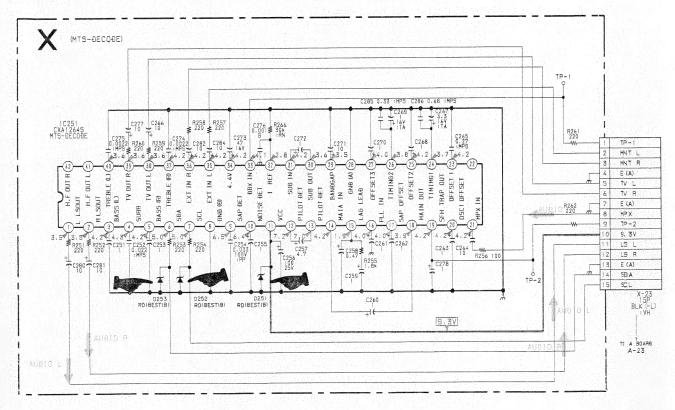
6-4. SCHEMATIC DIAGRAMS: PAGE 34 – 35 A BOARD



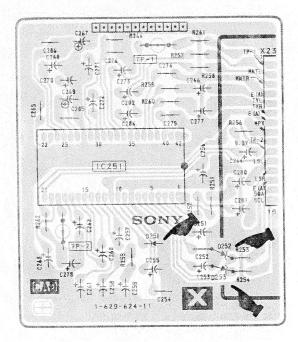
6-3. PRINTED WIRING BOARDS: PAGE 31 A BOARD



6-4. SCHEMATIC DIAGRAMS: PAGE 38 - 39 X BOARD



6-3. PRINTED WIRING BOARDS: PAGE 44 X BOARD



## SONY. SERVICE MANUAL

US Model Chassis No.SCC-C59C-A

### Canadian Model

Chassis No.SCC-C60C-A

**SUPPLEMENT-2** File this supplement with the service manual.

INTRODUCTION

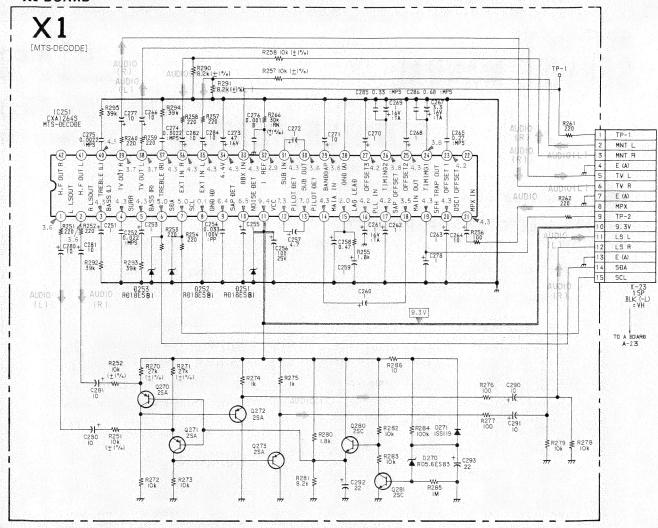
: Indicates added portion

1. Added: X1 board.

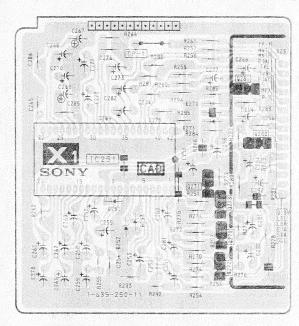
REF. NO. PART NO. DESCRIPTION REMARK REF. NO. PART NO. DESCRIPTION  *1-635-250-11 X1 BOARD <1C>									REMARK			
*1-635-250-11 X1 BOARD					<1¢>							
	*1-568-380-21	PIN, CONNECT	OR 15P			10251	8-752-035-54	IC CXA1264S				
					<transistor></transistor>							
C251 C252 C253 C254 C255	CAP 1-124-791-11 1-136-157-00 1-124-791-11 1-130-309-00 1-124-791-11	ELECT FILM ELECT FILM ELECT	1MF 0.022MF 1MF 0.033MF 1MF	20% 5% 20% 5% 20%	50V 50V 50V 100V 50V	Q270 Q271 Q272 Q273 Q280	8-729-119-76 8-729-119-76 8-729-119-76 8-729-119-76 8-729-423-37	TRANSISTOR : TRANSISTOR : TRANSISTOR :	25A1175- 25A1175- 25A1175-	HFE HFE HFE		
C256 C257 C258 C259	1-124-478-11 1-124-927-11 1-124-902-00 1-124-791-11	ELECT ELECT ELECT ELECT	100MF 4.7MF 0.47MF 1MF 1MF	20% 20% 20% 20%	25V 50V 50V 50V	Q281	<res< td=""><td>ISTOR&gt;</td><td></td><td></td><td></td><td></td></res<>	ISTOR>				
C260 C261 C262 C263 C264	1-124-791-11 1-131-347-00 1-124-791-11 1-124-791-11 1-123-875-11 1-136-170-00	ELECT TANTALUM ELECT ELECT FIECT	IMF IMF IMF IMF	20% 20% 20% 20% 20%	16V 50V 50V 50V	R251 R252 R253 R254 R255	1-215-443-00 1-215-443-00 1-249-409-11 1-249-409-11 1-249-420-11	METAL METAL CARBON CARBUN CARBON	8.2K 8.2K 220 220 1.8K	1 % 1 % 5 % 5 %	1/5 W 1/5 W 1/4 W 1/4 W 1/4 W	
C265 C266 C267 C268 C269	1-136-170-00 1-123-875-11 1-131-368-00 1-124-791-11 1-131-347-00 1-124-791-11	FILH ELBCT TANTALUH ELECT	0.27HF 10HF 3.3HF 1HF	20% 10% 20%	50V 50V 16V 50V 16V	R256 R257 R258 R259 R260	1-249-409-11	METAL METAL	100 10K 10K 220 220	5% 1% 5% 5%	1/4 W 1/5 W 1/5 W 1/4 W	
C270 C271 C272 C273 C274	1-124-791-11 1-123-875-11 1-124-791-11 1-124-477-11 1-130-475-00 1-130-475-00	ELECT ELECT ELECT ELECT	10 MF 10 MF 1 MF 47 MF	20% 20% 20% 20% 20%	50V 50V 50V 16V	R261 R262 R266 R270 R271	1-249-409-11 1-249-409-11 1-215-456-00 1-249-428-11 1-249-428-11	CARBON HETAL CARBON	220 220 30K 8.2K 8.2K	5% 5% 5% 5%	1/4 W 1/4 W 1/5 W 1/4 W	
C275 C276 C277 C278 C280	1-130-475-00 1-102-074-00 1-123-875-11 1-124-791-11 1-123-875-11 1-123-875-11	HYLAR  CERAMIC ELECT ELECT ELECT	0.0022HF 0.001HF 10HF 1HF	5% 5% 10% 20% 20% 20%	50V 50V 50V 50V 50V	R272 R273 R274 R275 R276	1-215-455-00 1-215-455-00 1-249-417-11 1-249-417-11 1-249-405-11	HETAL HETAL CARBON CARBON CARBON	27K 27K 1K 1K 100	17 17 57 57 57	1/5 W 1/5 W 1/4 W 1/4 W 1/4 W	
C281 C282 C284 C285 C286	1-124-927-11 1-124-927-11 1-136-171-00 1-136-175-00	ELECT ELECT FILM FILM	10HF 4.7HF 4.7HF 0.33MF 0.68MF	20% 20% 5% 5%	50V 50V 50V 50V	R277 R278 R279 R280 R281	1-249-405-11 1-249-429-11 1-249-429-11 1-249-420-11 1-249-428-11	CARBON CARBON CARBON CARBON	100 10K 10K 1.8K 8.2K	5% 5% 5% 5% 5%	14 W 14 W 14 W 14 W 14 W	
C290 C291 C292 C293 C294	1-123-875-11 1-123-875-11 1-123-875-11 1-126-233-11 1-123-875-11	ELECT ELECT ELECT	10MF 10MF 22MF	20% 20% 20% 20% 20%	50V 50V 50V 50V 50V	R282 R283 R284 R285 R286	1-249-429-11 1-249-429-11 1-249-441-11 1-247-903-00 1-249-393-11	CARBON CARBON CARBON CARBON CARBON	10 1 M 100 K 10 K 10 K	5% 5% 5% 5%	14 0 14 0 14 0 14 0	
<90010>					R290 R291 R292	1-215-441-00 1-215-441-00 1-249-433-11	KETAL KETAL CARDON	6.8K 6.8K 22K	1% 1% 5%	15 W 15 W 14 W		
D251 D252	1 8-719-110-48 DIODE RD18ES-B1					R293 R294	1-249-433-11 1-249-433-11	CARBON 22K CARBON 22K		5 % 5 %	1/10/	
D252 D253 D270 D271	8-719-110-48 8-719-110-48 8-719-109-90 8-719-911-19	DIODE RD18ES DIODE RD5.6E	-81 S-83			R295	1-249-433-11	CARBON	22K	5%	NW	

# SECTION 6 DIAGRAMS 6-2.SCHEMATIC DIAGRAMS AND PRINTED WIRNING

#### X1 BOARD



-X1 Board-



Sony Corporation
TV Group

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